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Epidemiology

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25 February 1992

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ANGOLA

Sleeping Sickness, Cholera Ravage Kwanza-Norte

92WE0153B Luanda JORNAL DE ANGOLA
in Portuguese 1 Nov 91 p 2

[Article by Isidoro Natalicio]

[Text] Dondo—The level of public health among the inhabitants of Katambe Municipio is extremely troubling, to judge by the escalating proliferation of some epidemics. Because no proper standards of combat have been practiced for several years, the hospital in this placid locale has registered 534 cases of sleeping sickness to date, with 14 deaths.

In the first part of this month [October] alone, 70 cases were reported, or almost four cases per day. It is difficult to determine the precise number of existing cases, because most of the victims are not under the hospital's care.

"We are dying of sleeping sickness in Massangano and Cassualala and not all of us have the transport means to get here to the hospital; the situation is very serious," a patient in the hospital pavilion lamented in anguished tones.

The pavilion (formerly the barracks for colonial occupation troops, built more than a century ago) is inadequate to handle the large number of patients. It has a number of problems, from the lack of beds and poor lighting (supplied by oil lamps which smoke very badly) to the poor food, which consists simply in boiled sweet potatoes and bananas.

Preventive measures have not had the desired effect, since they are not based on efficient methods; it would be more advisable to adopt a system of total and systematic spraying of the regions most affected by the tsetse fly. According to information gathered at the locale, such operations have not been conducted for 12 years. A system of traps was tried a few years ago, but the results are unknown because it was applied in areas that were greatly affected at that time by the war that was being waged then. Curative measures have not met expectations, for want of Pentamedina.

The tsetse fly, the transmitter of the disease, normally breeds in humid intertropical climates, dense forests, and in areas with extensive waterways (in this case the Kwanza and Lucala rivers and the adjacent lakes), characteristics typical of the entire extent of Kambambe Municipio.

Attention to Cholera

Moreover, in the rainy seasons in these parts, the cholera epidemic has reached alarming proportions and is currently considered one of the major causes of death. More than 1,700 victims have been brought into the Emergency Clinic, and this is presumed to be an insignificant percentage of the total number of cases.

Preventive measures are not proving effective, because of the consumption and use of contaminated water (the water in Dondo is not treated), very poor public and personal hygiene, and the generally unhealthy environment. Preventive measures have not been the rule. There is a shortage of vaccines and where they exist there is the problem of conservation for want of cold storage chests.

There are no transport vehicles to support the General Vaccination Programs, and treatment is minimal because of the shortage of medicines, specifically serums.

It should be noted that, in addition to the above-mentioned epidemics, there are also numerous cases of measles, malaria, and acute diarrhea, among others.

Deplorable Conditions at Hospital

At the top of one of the numerous mountains that surround the old city of Dondo, which has been in existence for more than 400 years, sits the municipal hospital. Built in the 1940's, the hospital is reasonable in size and its architecture is modern, but the building is simply in deplorable condition.

It is in urgent need of a complete overhaul. It needs to be painted, doors and windows should be installed, the leaking roofs should be repaired, and the faulty electrical system constantly short-circuits. The water taps have not functioned for several years, making it difficult to maintain any standard of hygiene and affecting operations in some technical areas.

The hospital has sections for maternity, surgery, stomatology, and radiology, a laboratory, and an emergency clinic, all of which are functioning poorly for lack of everything from medicines (basically antibiotics) to supplies and equipment. The 10 nurses, some of whom are specialized, are insufficient in number and are struggling with difficult living conditions. For example, for want of facilities, some of them have been using bath houses as dormitories for more than two years, incredible as it seems.

The hospital has a 40-bed capacity, but only 28 beds are in use, because of the shortage of mattresses and bedding, despite the fact that there is a textile complex in the area, even though it operates only irregularly. For want of lamps, the lighting is inadequate, even in the wards where patients are interned.

Because the hospital has no ambulance, patients in serious condition are evacuated to Ndalatanda or Luanda by "candongueiro" [trucks that deliver goods to the unofficial markets], sometimes even lying on top of the merchandise, with the result that many of them die along the way (about 74 and 120 kilometers, respectively).

The support services, namely the kitchen and the laundry, are not functioning because the (industrial type) stoves to cook the food and heat the water have been out of operation for some time.

Insufficient Immunization Coverage Deplored*92WE0153A Luanda JORNAL DE ANGOLA
in Portuguese 5 Nov 91 p 3*

[Article by Fernanda Maria]

[Text] About 40,000 children under five years of age die every year in this country because of the poor immunization coverage. Only about 50 percent of the children less than one year old have been vaccinated against tuberculosis, while only 40 percent have been vaccinated against measles and 25 percent have received DPT [Diphtheria/Pertussis/Tetanus] and polio immunizations. The statistics were reported by Dr. Martinho Epalanga, vice minister of health, at the closing session of the Sixth Methodological Conference of provincial supervisors of the General Vaccination Program (PAV).

The meeting took place from 28 October to 2 November in the Superior Nursing Institute in Luanda. It was attended by the PAV supervisors of all the provinces except Moxico. During the meeting, the obstacles contributing to the poor execution of the program were analyzed. It was concluded that the failure to mobilize the public, the shortage of transport means, and the shortcomings in the health system are among the principal factors responsible for the situation.

The need for better communication with the public was also discussed during this sixth PAV meeting. It was also concluded that the efforts of the activists are valid and necessary, but in this case the recruitment base should be broadened in other institutions, such as churches, charitable associations, clubs, schools, and so on, making the voluntary nature of this work immediately clear.

During the meeting, other issues that affect the execution of the PAV were analyzed, such as the management of the Cadia de Frio [not further identified] and the problem of epidemiological vigilance. Regarding the latter, it was deemed necessary to understand and predict the epidemiological behavior of the diseases and to predict the changes in the course of the epidemics; control measures were proposed for application in each case.

The target diseases of the PAV are tuberculosis, whooping cough, poliomyelitis, diphtheria, tetanus, measles, and yellow fever.

Measles Outbreak Kills 105 Moxico Children in 50 Days*MB1712174791 (Clandestine) Voice of Resistance of the Black Cockerel in Portuguese to Southern and Central Africa 0500 GMT 17 Dec 91*

[Text] A major measles epidemic is spreading in Moxico Province. Sources with the National Union for the Total Independence of Angola, UNITA, health services says that more than 105 children have died of measles in Leua District alone in less than 50 days.

The spread of the disease is due to the lack of a vaccination program in areas previously under control of the Angolan Government. To save the lives of thousands of children, UNITA doctors in the area have asked for assistance from UNICEF and The Save The Children [preceding words in English].

COMOROS**Mayotte Malaria Incidence Rising***92WE0154 Victoria SEYCHELLES NATION
in French 25 Oct 91 p 3*

[Unattributed article: "Mayotte Facing Malaria Epidemic"]

[Text] Since the beginning of the second quarter, the island of Mayotte has been facing a malaria epidemic that has already caused a few deaths, we learned Tuesday from a medical source.

The authorities did not publish the exact number of deaths, nor the number of persons affected by the disease, but the dead were people who failed to report quickly to a clinic, they indicated.

Measures were taken to eliminate the breeding places of the mosquitoes that transmit the disease. Unemployed young people were hired to clean the gutters in local communities and fill up stagnant water pools. Insecticide was sprayed, and nivaquine was distributed to the people.

But with a health budget slightly above 370 francs [Fr] (\$65) per person per year (compared with Fr6,000 in French overseas department) and a high population growth rate (plus 40.6 percent in six years), Mayotte finds it increasingly difficult to tackle the resurgence of malaria, medical circles pointed out.

Yet, in 1989, the incidence of malaria in the island was down to 1 percent, compared with 30 percent in the neighboring Islamic Republic of the Comoros.

That same year, in Madagascar, the disease caused over 100,000 deaths.

GHANA**Meningitis Controlled in Upper East***92WE0201A Accra PEOPLE'S DAILY GRAPHIC
in English 31 Oct 91 p 16*

[Article by Abdul Aziz, Zebilla]

[Text] The Upper East Region has recorded no serious cases of the cerebro spinal meningitis (CSM) since 1989 as a result of a vaccination exercise undertaken during the dry season against the six killer diseases.

Dr. Kwame Adogboba, Regional Director of Health Services, who disclosed this said many lives have been saved due to this state of alertness by the Ministry of Health (MOH).

Dr. Adogboba who spoke at this year's World Health day held at Zebilla in the Bawku West District on Tuesday, themed "when disaster strikes are you prepared," said three months ago the ministry was able to bring under control the cholera outbreak which affected over 3,000 people in the region.

He said out of the 3,000 reported cases, only 34 died because the MOH was well-prepared for the cholera outbreak.

The Regional Director of Health Services therefore appealed to district assemblies in the region to give more support to the educational programme of the MOH to help reduce death through epidemics.

Alhaji Amidu Solemana, Deputy Secretary for the region, urged district assemblies to intensify sanitation programme in the region to prevent the outbreak of epidemics.

He deplored the present poor sanitation in most of the district capitals where piles of rubbish are left uncleared.

He said the disaster relief committees in the region will be actively involved in the Ministry of Health programme to deal with epidemics and sanitation exercise.

Cholera Outbreak at Karaga

92WE0201B Accra PEOPLE'S DAILY GRAPHIC
in English 15 Nov 91 pp 8-9

[Article by Brilliant Hushie, Karaga]

[Text] An outbreak of cholera at Karaga in the Gushiegu/Karaga District in the Northern Region last Tuesday has claimed 18 lives.

As at Wednesday morning, 12 other cases had been recorded and the victims are on admission at the Karaga Health Centre.

Mr. Abudu Seidu, Medical Assistant in charge of the district who briefed the third session of the district assembly held at Gushiegu on Wednesday said nurses and other para-medical staff have been rushed to Karaga from Gushiegu to assist the staff there.

He told the assembly members that there is no care for cholera often than maintaining a clean environment and observing hygienic habits.

MOZAMBIQUE

Cholera Kills 24 in Chiure, Cabo Delgado Province

MB1912154591 Maputo Radio Mozambique Network
in Portuguese 1030 GMT 19 Dec 91

[Text] The newspaper DIARIO DE MOCAMBIQUE reports that cholera has already killed 24 people in Cabo Delgado Province's Chiure District since the outbreak of the epidemic in the area in December 1990. The source added that hundreds of other people show diarrhea symptoms.

A medical team is at present in the district to treat sick people, assemble a special clinic, and promote health education.

However, it has been reported that efforts by health personnel in Cabo Delgado Province to try to deal with the situation have been hindered due to difficulties in communicating with Chiure by road, because of the war.

Early this year a person died of cholera in Pemba city, also in Cabo Delgado Province.

Cholera Returns to Maputo, Gaza, Cabo Delgado Provinces

MB3112102891 Maputo Radio Mozambique Network
in Portuguese 0800 GMT 31 Dec 91

[Text] Cholera has returned to Maputo, Gaza, and Cabo Delgado Provinces in November, after remaining relatively dormant for about two months. The NOTICIAS newspaper reports that 550 cases have been detected and seven deaths have occurred in Maputo Province and Maputo city.

Quoting a source in the Health Ministry, the NOTICIAS newspaper reports that no cholera cases were recorded in the country between August and mid-November of this year. NOTICIAS also learned that Mozambique's provinces have the capability to respond to a reemergence of the epidemic.

Gaza Province Reports 66 Cholera Cases Since Dec 1991

MB0401181492 Maputo Radio Mozambique Network
in Portuguese 1500 GMT 4 Jan 92?

[Text] An health official has disclosed that 66 cholera cases and two deaths have been reported since the epidemic broke out in Gaza Province in December 1991.

That source also reported that the epidemic broke out in Tatuao, an area that is mostly inhabited by war-displaced people.

Cholera Deaths in Cabo Delgado Total 24

MB0601200492 Maputo Radio Mozambique Network in Portuguese 1730 GMT 6 Jan 92

[Text] Since the disease broke out there during the second half of November last year, 24 people have died of cholera in Chiure District, Cabo Delgado Province. According to DIARIO DE MOCAMBOQUE, the disease has already spread to the villages of Nimala, Mulala, 25 de Setembro, and Chiure Velho. Medicines have already been sent to the district where 250 cholera cases have already been registered.

Nine Cholera Cases in Quelimane

MB1101190292 Maputo Radio Mozambique Network in Portuguese 1730 GMT 11 Jan 92

[Text] Health authorities have diagnosed nine cholera cases in Quelimane, Zambezia Province, in the past few days. The provincial health chief said the epidemic was detected in 35 patients with diarrhea.

The Health Department in that province has taken action aimed at avoiding the spread of the disease in Quelimane.

One Cholera Case in Pemba City

MB1501121692 Maputo Radio Mozambique Network in Portuguese 1730 GMT 13 Jan 92

[Text] The first cholera case was diagnosed in Pemba in December 1991. Our Cabo Delgado correspondent reports that the outbreak of the epidemic in that city poses a serious threat bearing in mind the poor sanitation conditions in Pemba.

At least 24 people have died of cholera in the province's Chiure District.

Quelimane City Reports 23 Cholera Cases

MB2001120592 Maputo Radio Mozambique Network in Portuguese 1030 GMT 20 Jan 92

[Excerpt] The health authorities in Quelimane, Zambezia Province, are worried about a cholera outbreak. A total of 23 cholera cases had been confirmed early last week, and reports say that the number is likely to rise. [passage omitted]

Leprosy Cases Recorded at 19,000

MB1401132492 Maputo Radio Mozambique Network in Portuguese 0800 GMT 14 Jan 92

[Text] Mozambique has 19,000 recorded cases of leprosy, mainly in Nampula, Cabo Delgado, and Zambezia provinces. The NOTICIAS newspaper reports that the exact number of leprosy cases in Mozambique is unknown, though the country has the highest number of leprosy cases in Africa.

NAMIBIA**Outbreak of Livestock Disease in Caprivi 'Under Control'**

MB3012184791 Johannesburg Radio RSA in English 1500 GMT 30 Dec 91

[Text] The Namibian Ministry of Agriculture says the outbreak of foot-and-mouth disease in the northeastern Caprivi Province is now under control.

The Ministry said livestock in Caprivi would now be vaccinated twice a year, as a precaution against foot-and-mouth disease. It said a new fence would be constructed on the Angolan border in the new year to keep Namibian livestock from coming into contact with infected livestock and wildlife in Angola.

SOUTH AFRICA**Lebowa Health Minister Notes Decline in Malaria Incidence**

MB2401185392 Johannesburg Radio RSA in English 1500 GMT 24 Jan 92

[Text] The health minister in the self-governing state of Lebowa in southern Africa, Mr. S.R. Mahanaka, says the incidence of malaria is declining in his state. Mr. Mahanaka has attributed it to the annual spraying program, intensive training of his personnel, and the cooperation of the communities, and also the condition of drought. He has appealed to the communities in Lebowa to cooperate with health inspectors in order to control the spreading of the disease.

Health Authorities Report Two Cases of Cholera 10 Jan

MB1101062392 Johannesburg SAPA in English 2249 GMT 10 Jan 92

[Text] Pretoria Jan 10 SAPA—Authorities reported two cases of cholera on Friday, in what they said were the first reported cases since an epidemic that gripped South Africa between 1980 and 1987.

The Department of National Health said in a statement the two men were examined at Shongwe Hospital in KaNgwane and results showed they were suffering from the intestinal disease.

"These are the first cases of cholera reported in the general public since the previous cholera epidemic which lasted from 1980- 1987," it said.

The statement added that one of the men, aged 37, had developed complications but the other, a 60-year-old farm labourer, was in a satisfactory condition.

Health authorities put out a warning late last year after reports that cholera was sweeping central Africa and neighbouring countries.

"The monitoring programme has been stepped up and expanded," the Department of National Health said in its statement.

UGANDA

Meningitis Outbreak in Lira District

*EA1001142592 Kampala Radio Uganda Network
in English 0700 GMT 9 Jan 92*

[Text] There are reports that an epidemic of meningitis disease has hit Moroto country in Lira District. According to a UNA correspondent in Lira, at least 40 people have so far been killed and many others are in serious conditions. Counties like Otuokei and Erute are also reported to have been badly hit. Lira District administration and medical authorities of the district are said to be working round the clock to ensure that the situation is contained and that the vaccines for the disease have already arrived in the district.

ZAMBIA

Kitwe Area Cholera Outbreak Continuing

*92WE0203A Lusaka TIMES OF ZAMBIA in English
25 Nov 91 p 1*

[Text] Five more cholera patients died in Kitwe yesterday bringing the death toll to 13 from the time the disease broke out last week.

And 20 people were admitted at various centres.

Because of the seriousness of the outbreak Kitwe Central Hospital had closed its outpatients, dispensary, chest and dental clinics to create room for patients admitted for observation.

A ward has been set up where diarrhoea patients were taken for examinations to find out if they have cholera or not before they are transferred to centres.

Senior medical superintendent Dr. Clement Ngubai who would neither deny nor confirm the deaths said he did not know because patients were taken to centres immediately after examinations.

And provincial medical and education officers have been advised to use their discretion with schools affected by cholera and dysentery.

Health Minister Dr. Boniface Kawimbe said this when he addressed University Teaching Hospital (UTH) staff in Lusaka yesterday.

Should the authorities decide to close institutions, pupils sitting for examinations should be allowed to remain at schools as the congestion would have lessened.

Worst place hit by dysentery was Western Province where a team of medical officials and experts from the Tropical Diseases Research Centre in Ndola have been sent to combat the disease.

Dr. Kawimbe said the Government would set up three community hospitals to de-congest the UTH which was in need of massive rehabilitation.

He told the staff one would be in Kafue. The remaining two would be built in high density areas in Lusaka.

The European Economic Community had promised to assist in financing the rehabilitation programme at the institution.

Medical staff have been allowed to work for private practitioners in their free time to earn extra funds.

Zana reports: Police in Mufulira have with immediate effect stopped transporting from homes bodies of people suspected to have died of cholera or other natural causes and have said it was the responsibility of the district council.

But the council's health department officials said they were not responsible while the cholera task force [which] maintains it was not established for that purpose.

At a heated cholera surveillance committee meeting at Malcolm Watson Hospital yesterday Mufulira district deputy police chief Frederic Muyunda said policemen in the district would no longer collect bodies from homes whether they died from cholera or other causes.

Cholera in Mwense has claimed one death at Chibondo clinic where two secondary school pupils are admitted.

Cholera Epidemic Spreads to Chililabombwe

MB2112123591 Lusaka Zambia National Broadcasting Corporation Network in English 1800 GMT 20 Dec 91

[Text] The cholera epidemic has now spread to Chililabombwe where two people have been admitted at a designated center. Cholera has [words indistinct] Chililabombwe since the epidemic broke out throughout the country about four years ago and the two are the first known cholera patients in the district.

District Cholera Surveillance Committee Chairman Dr. Emmanuel Musonda, who is also ZCCM [Zambia Consolidated Copper Mines] Konkola Division Chief Medical officer, confirmed this today. Dr. Musonda said the two cholera patients were out of danger, and referred press queries to Copperbelt Provincial Medical Officer Dr. David Kwendakwema of Ndola.

Nine Cholera Deaths Recorded Over Last Week*MB2812085391 Johannesburg SAPA in English
0836 GMT 28 Dec 91*

[Text] Lusaka Dec 28 SAPA—Nine more people died of cholera in Zambia this past week, bringing the death toll since the outbreak of the water-borne killer disease last October to 494.

Ministry of Health Permanent Secretary Dr. Everiste Njelesani who announced the latest deaths in Lusaka on Saturday, said the worst-hit towns were Ndola and Kitwe on the Copperbelt, where 117 cholera cases were recorded.

Luapula Province, which has had three deaths and 32 cases in the past week, recorded 255 deaths since the latest outbreak.

Cholera is a water-borne disease which causes rapid dehydration of the body, killing sufferers within hours. The disease is caused by water which is infected by human faeces.

A total number of 481 deaths were recorded to dysentery, according to Dr. Njelesani, which 27,524 cases reported countrywide since May.

Health Official Confirms Cholera Cases in Lusaka*MB0801140992 Johannesburg SAPA in English
0839 GMT 8 Jan 92*

[Text] Lusaka Jan 8 SAPA—A cholera epidemic has hit the Zambian capital of Lusaka resulting in one fatality out of 36 cases reported.

SAPA's correspondent reports that the epidemic has scared local residents, with some refusing to send sick relatives to hospitals and clinics out of fear they may contract the disease there. Zambian deputy minister of health, Dr. Katele Kalumba, confirmed on Wednesday that the disease, which had been confined to the Copperbelt, Luapula and northern provinces, had spread to Lusaka, the central and southern provinces, causing great concern.

Only two regions, the Eastern and Western Provinces, had been spared, but medical authorities said it could spread there.

Dr. Kalumba has advised Lusaka residents to observe strict health standards.

"High sanitation is imperative if cholera is to be contained. This is the only panacea to this dreaded disease," Dr. Kalumba added.

Some Lusaka residential areas have been hit by a chronic water shortage for a decade, aggravating the use of infected water.

Dr. Kalumba said by September 30, 1991, 3,040 cholera cases had been reported nationwide out of which 363

people had died while 67 patients were being treated at various cholera treatment centres throughout the country.

The Ministry of Health needed more than ZK[Zambian kwachas]80 million to combat the disease, but only ZK60 million had been released by the Ministry of Finance.

Cholera Fatality Rate 'Overshooting' WHO Estimates*MB1101114592 Johannesburg SAPA in English
1100 GMT 11 Jan 92*

[Text] Lusaka Jan 11 SAPA—Zambia's Ministry of Health has warned the public against the indiscriminate use of antibiotics, claiming some cholera patients had allegedly died because they were resistant to the drugs.

At least 369 people have lost their lives since the epidemic outbreak five months ago.

Deputy Minister of Health Dr. Kalumba Katele said in a statement in Lusaka on Saturday that six patients had proved resistant to tetracycline and septrin, compelling the ministry to use gentamycin, a more expensive drug.

The cholera death toll had reached 369 while the disease's fatality rate nationwide was 11.9 percent, overshooting the 10 percent stipulated by the World Health Organisation (WHO).

"This is a very serious situation because this means we will need more funds to buy more consignments of this drug using our already tight budget," Dr. Katele said.

The public should be made aware they were endangering their lives by buying antibiotics from unregistered dealers in the streets and townships precipitating resistance to drugs and efficacy when they contracted fatal diseases.

"The ministry is taking the matter very seriously and will scrap private dealing of drugs. We can't allow informal sector medicine to continue—it is dangerous," he stressed.

Lusaka recorded 42 cases and two deaths in a week since the disease broke out in the capital.

Dr. Katele said the government would take greater control over the distribution of drugs to ensure legitimate pharmacies were provided with the medicine.

Northern Province Combatting Dysentery*92WE0203B Lusaka TIMES OF ZAMBIA in English
15 Nov 91 p 1*

[Text] Dysentery which broke out in Kasama has spread to schools in Mbala and Isoka in Northern Province raising fears the ravaging disease may disrupt Grade Seven and 12 examinations.

Chief education officer Mr. Ndilubila Ngosa confirmed in Kasama yesterday 15 cases had been reported at Mbala Secondary School, and a number of patients were treated at Isoka Secondary School.

"The situation is really getting out of hand. We may have to close if medical personnel recommend us to do so," he said.

Like cholera, dysentery seized victims who died within hours if they were not attended to. So far 30 people have died in Northern Province since the outbreak.

Though Mr. Ngosa maintained that unless a recommendation was made to shut the schools, a ministry headquarters spokesman in Lusaka said individual school authorities should use their discretion and shut institutions to save lives.

Acting headmaster at Kasama Secondary School Mr. Richard Simukoko said all pupils except those writing examinations should be sent home to combat the spread.

He complained that a medical team that came to the school did not bring any drugs for treatment.

It was understood that pupils were being turned away because they could not afford hospital fees. Provincial medical authorities were not available to comment.

Many parts of the province have been hit by a diarrhoea outbreak mostly because of water rationing practised to stretch the poor supply, Kasama General Hospital medical superintendent Dr Gerhard Brouer said yesterday.

He told the *TIMES* in a telephone interview that higher authorities should provide sufficient funding to obtain requisites to maintain high standards of hygiene.

Up to 100 pupils from Kasamas Girls' Secondary School reported this week to have been hit by dysentery had proved to be diarrhoea patients except for three severe cases under observation at the hospital.

Dr. Brouer urged parents of girls at the school not to panic since all dysentery cases had proved negative including the reported 206 from Mungwi Secondary School which were diarrhoea. Only one case at the school proved to be dysentery.

After inspecting Kasama Girls, Dr. Brouer said boarding lacked sufficient plates to cover food in the dining hall while the ablution block had no soap.

He complained about water rationing because it kept the ablution block dry for long periods.

Management and staff had invited the medical team from the hospital to examine the girls and disinfect the block and other unhygienic areas.

"We do not expect this to be a chronic problem and we are doing everything possible to end the scourge," Dr. Brouer said.

Mr. Simukoko praised a businessman who donated dishes and plates to the school.

And Zana reports: An outbreak of dysentery is reported in Luano Valley of Mkushi district and Government is to send Zambia Flying Doctor Service to the area to determine the situation.

Central Province permanent secretary Lt.-Gen. Peter Zuze confirmed this in Kabwe but said he did not know how many people were down with the disease.

Provincial medical officer Dr. Helen Mutambo declined to discuss the matter on the phone.

Lusaka Training Hospital Reportedly 'Near Collapse'

*MB2312082691 Johannesburg SAPA in English
0738 GMT 23 Dec 91*

[Text] Lusaka Dec 23 SAPA—Zambia's University Teaching Hospital (UTH) was in near collapse due to the dilapidated equipment, shortage of manpower and cash to run the institution efficiently.

UTH Deputy Director Dr Isaah Yikona speaking on the Zambian TV programme "Topic" in Lusaka on Sunday night said:

"If we had our own way, we would have closed the hospital. The institution has virtually collapsed because partial medical services are being provided to the people."

The hospital's laboratories were not functioning, while theatres were operating inadequately and only in emergency cases, he said.

"The mortuary status was a disaster. It is handling more than 200 bodies than the available capacity to hold 50 bodies at a time," Dr. Yikona stressed.

The hospital, which needed a cash flow of more than ZK[Zambian kwachas]2 billion a year, was only operating at 30 percent capacity while the equipment had totally broken down, needing urgent rehabilitation.

UTH Public Relations Officer Don Mwape echoed Dr. Yikona's sentiments by saying the Ministry of Health should immediately step in to redress the many hiccups faced by the few doctors.

A panel suggested the new Movement for Multi-party Democracy (MMD) government should build satellite hospitals within the periphery of Lusaka to reduce the strain on UTH, which should only act as referral.

If adequate funding and the improvement of equipment were undertaken, patients currently being sent abroad could be treated here.

"It is tragic that this was happening when we have very qualified doctors, but they don't have the equipment and the facilities under which to operate," Dr. Yikona lamented.

Minister of Health Dr. Boniface Kawimbe said: "We are doing everything to reverse the past trend."

ZIMBABWE

Incidence of Bilharzia Increasing Annually
92WE0202B Harare THE HERALD in English
6 Nov 91 p 1

[Article by Ronald Imbayago]

[Text] More than three million people in Zimbabwe are suffering from bilharzia and every year at least 10,000 of them die from the disease or are chronically afflicted, the director of the Blair Research Laboratory, Dr. Stephen Chandiwana, has said.

In an interview in Harare yesterday Dr. Chandiwana said the incidence of the disease was increasing annually because of increased irrigation schemes and the building of more dams to boost agricultural productivity.

Bilharzia was highly transmitted between September and November of each year "when human populations are concentrated at few remaining water bodies."

Dr. Chandiwana said: "Of the three million infected people, 10 percent are heavily infected and these may develop complications of the liver, brain and bladder. Three percent of the heavily infected people may die from the disease each year."

The Ministry of Health in June this year launched the first phase of the national bilharzia control programme in Zhulube, Matabeleland South, and in Chinyika resettlement area in Manicaland.

The programme would be extended to other districts countrywide. Under this programme, said Dr. Chandiwana, people in the rural areas would be expected to build a toilet for each family, improve safe water supplies so that they would not depend on unprotected water sources.

Prior to this programme, the Ministry of Health started a pilot programme at Mushandike resettlement scheme in Masvingo and the demonstration project was carried to other places such as Chaminuka District in Madziva.

Dr. Chandiwana said the pilot programme was a success in these two areas. The programme was started in 1985.

The programme currently under way will be similar to the pilot project and this will be a community-based programme.

Meanwhile, Dr. Chandiwana was last week awarded this year's Zimbabwe Scientific Association gold medal for

his outstanding research on bilharzia control, becoming the first black Zimbabwean to receive the award since the association was formed in 1891.

Scientist Participates in Prophylactic River Crossing

MB0801141192 Johannesburg SAPA in English
8 Jan 92

[Article by Takesure Matarise]

[Excerpts] Harare Jan 7 SAPA—Deep in the Nyandoro forests in Zimbabwe's Mashonaland East Province, a graduate of Britain's Sussex University walked across a river with his Vatsunga clan for immunity against disease.

There were no modern medicines, instruments or technology at this cleansing ceremony, 56km south-east of Harare.

The graduate holds a PhD in biochemistry and was for seven years a senior analytical chemist in Zimbabwe's Health Ministry. Today, he is hazardous substances control officer in the same ministry.

Last week, he and about 2,000 clan members simply crossed the Mupfure River to ensure they would not catch several predicted diseases.

He had been warned by a spirit medium of Biri Naganire, long-dead ancestors of his Vatsunga people, that the diseases were on their way, so he and 40 spirit mediums from Nyandoro led the 2,000 across the Mupfure to immunise them.

As he watched and the mediums played, no fewer than 200 people—mostly women—appeared to be possessed by spirits resisting the crossing.

There was no possession when he, too, crossed.

Mohronie Mushambadope, PhD biochem (Sussex) and a leading civil servant in Harare, is also Chief Nyandoro.

A model modern-day Zimbabwean chief, he finds nothing odd in encouraging people to walk across a river to ward off scabies, AIDS and [word indistinct] new disease which would, the medium warned, make its victims drop dead.

"I respect my culture," Mr Mushambadope told the ZIANA News Agency when asked if he believed the river crossing to be a fool-proof prophylactic. [passage omitted]

The frequency of the ceremony is dictated by spirit mediums who foresee problems ahead. The previous one in Nyandoro was more than 30 years ago; there is no record of its efficacy.

New Foot-and-Mouth Outbreak Stops Exports

92WE0162A Harare *THE HERALD in English*
5 Nov 91 p 1

[Text] Zimbabwe has suspended all exports of beef and its products, pork, milk and dairy products following a fresh outbreak of the contagious cattle disease, foot-and-mouth, at a farm in Mvurwi, right in the lucrative European Community's catchment area.

The outbreak—the 76th primary outbreak since 1931—is so far confined to just one farm, Whaddon Chase, where 200 out of 900 cattle are infected with the foot-and-mouth virus. The cattle have since been vaccinated.

All importers, including the EC have been informed about the outbreak. But all, with the exception of Botswana, have not yet responded. Botswana has notified Zimbabwe that it was banning all imports.

Confirmed

The infection was confirmed by the foot-and-mouth World Reference Laboratory in the United Kingdom on Friday night, the director of the Department of Veterinary Services, Dr Stuart Hargreaves, told a Press conference in Harare yesterday. All cattle at Whaddon Chase and those on surrounding farms have been vaccinated. Efforts to identify the source of the infection are under way.

The outbreak is a major blow to Zimbabwe's efforts to re-establish itself and fulfil its export quota of beef of 9,100 tonnes to the EC following the lifting of the 1989 ban on exports when the country experienced its worst outbreak in 20 years.

Beef exports to the EC were resumed late last year after about a year. The Department of Veterinary Services had said it had fully controlled the disease. Veterinary experts from the EC had also satisfied themselves. That ban cost Zimbabwe more than \$100 million worth of exports.

Exports had just begun to improve. In 1988, 12,000 tonnes were exported. But since the lifting of the ban about 12 months ago, 2,200 tonnes worth \$20 million were exported. At the moment, 600 tonnes a month were being exported from the Chinhoyi abattoir.

"As far as we can ascertain, only one farm is involved. We are still attempting to find the source of the infection. We are suspicious that the source has emanated from the Midlands Province as the farmer at Whaddon Chase had recently purchased 400 cattle which originated from the Midlands," Dr Hargreaves said. Movement of the 400 cattle had been authorised by the department.

"We are at this time tracing the origin of these cattle. We want to identify the previous farms (where) these cattle now in Mvurwi (were bought).

Contained

"The outbreak appears well contained. The farm and the immediate surrounding farms have been vaccinated."

Dr. Hargreaves said the foot-and-mouth World Reference Laboratory had confirmed that the type of the Mvurwi virus was SAT 2 (Southern Africa Territories) type. This is the same type as that which occurred in 1989.

"So we believe there is a connection between this outbreak and the 1989 outbreak, which was primarily in the Midlands."

Speaking at the same Press conference, the chairman of the Cattle Producers' Association, Mr Graham Franceys, said his association was dismayed at the outbreak especially as it was going to seriously affect exports, which had just begun to pick up following the lifting of the 1989 ban late last year.

Mr. Franceys said he was confident that the Department of Veterinary Services would get on top of the situation and effectively control "what appears to be an isolated outbreak."

Diagnosed

The 1989 outbreak was first diagnosed at a farm in Mutorashanga. Although the source of the infection could not be pinpointed, all indications pointed to the presence of buffalo around Gweru. Buffaloes are known to be effective carriers of the FMD virus.

When the disease was diagnosed at the farm in Mutorashanga, the Department of Veterinary Services took a drastic action by killing and burning 66 cattle on the farm.

However, Dr. Hargreaves said the 200 cattle infected at Whaddon Chase was a "bigger problem" than at Mutorashanga. "But we will consider destocking the farm at a later stage and the animals that can be slaughtered will be slaughtered. Breeding stock will be moved into a foot-and-mouth evacuation zone down in the south-east Lowveld areas."

Search for Foot-and-Mouth Carriers Underway

92WE0202C Harare *THE HERALD in English*
9 Nov 91 p 1

[Text] The Veterinary Department starts a hunt for carriers of the foot-and-mouth virus in the Midlands next week to find the source of the latest outbreak of the disease while the police are introducing special stock-theft units to help minimise the risk of the disease spreading.

The veterinary exercise, to cost about \$100,000, will involve sampling of each beast on selected Midlands farms at a cost of nearly \$225 each, trace the source of the foot-and-mouth virus which has grounded Zimbabwe's multi-million dollar beef exports to Europe.

Dr. Stuart Hargreaves, the director of veterinary services, said yesterday between 300 and 400 cattle would be sampled at farms near Gweru, the origin of the infected cattle now at Whaddon Chase farm in Mvurwi, Mashonaland Central.

"We think that the source is from carrier cattle which were exposed to infection in 1989," said Dr. Hargreaves.

The last major outbreak of the disease was in 1989 and was traced to the Midlands after infected cattle were exhibited at the Zimbabwe International Trade Fair in Bulawayo.

"Several hundreds of cattle—they can be between 300 and 400—will be sampled and we hope to have established the source of the disease in two weeks time," he said.

Dr. Hargreaves said carrier cattle (those that would have been treated and recovered from the disease), worldwide, have never been suspected of causing outbreaks of foot-and-mouth, except in Zimbabwe.

"Carrier cattle show no signs of the disease yet they carry the virus in their throats," said Dr. Hargreaves.

Zimbabwe, said the director, has a better experience and knowledge about the disease. The discovery by Zimbabweans that carrier cattle can cause the outbreak of the disease would influence the control of the foot-and-mouth disease the world over.

"Here in Zimbabwe, because of our knowledge of the disease, cattle that were previously infected with the disease are quarantined (they can't be moved from one place to another without ensuring that it is safe to do so)."

In other countries the quarantine was just six months while in Zimbabwe cattle which would have recovered from the disease could be kept at one place for at least two years or more, he said.

Since last year, the department has sampled 2,216 cattle countrywide to evaluate the carrier state.

"Of the 2,216 cattle on previously infected farms, 13 have been found to be carriers. The project, which is still under way, has so far cost the department \$500,000," said Dr. Hargreaves.

The recent outbreak is the 76th primary outbreak since 1931 and is so far confined to just one farm, Whaddon Chase, where 210 cattle were affected.

The foot-and-mouth World Reference Laboratory has since confirmed that the type of the Mvurwi virus was

SAT2 (Southern African Territories) type. This is the same type as that which occurred in 1989.

Because of the outbreak, Zimbabwe stands to lose about \$120 million annually in foreign currency from the current suspension of all exports of beef and dairy products.

The spiral in stocktheft over the past year, and the associated illegal movements of stolen cattle, also threaten to spread the virus unless checked.

Police figures show that 45 percent more cattle were stolen in the first 10 months of this year than in the whole of last year.

From January 4 this year to November 6, a total of 8,946 head of livestock, mainly cattle, valued at \$3,776,892,50, [as printed] were stolen. Of these, 1,215, representing 13.6 percent of the total stolen, were recovered. The recovered livestock were valued at \$674,012.

During the period from January 4, 1990 to December 31, 1990, 6,177 livestock worth \$2,702,037 were stolen and 922, valued at \$462,935 were recovered.

In an interview with THE HERALD in Harare yesterday, Senior Assistant Commissioner (Operations) John Chademana, said the steep rise in stocktheft "definitely" called for the police to increase the number of anti-stocktheft teams in the provinces. Each province has one team at the moment.

"This is (additional anti-stocktheft teams) apart and in addition to local police. These special teams will just be for stocktheft," Cde Chademana said.

If the incidence of stocktheft and the other livestock crimes are not checked, the disease may spread, thus jeopardising Zimbabwe's chances of a quick return to exporting.

Cde Chademana said although the police were not responsible for the issuing of permits for cattle movement, they enforced the law by checking "on persons (moving cattle) when there is reason to suspect cattle were stolen."

The senior assistant commissioner said although he could not give, off-hand, in which areas stocktheft was prevalent, it was, however, a fact that the majority of the victims were large-scale commercial farmers.

He urged the farming unions to warn their farmers about the dangers and temptation to move cattle without seeking authority or approval from the Department of Veterinary Services who issued the permits.

Children in Rural Areas To Receive Immunization

HK1501105292 Beijing CHINA DAILY in English
15 Jan 92 p 3

[Article by staff reporter Zhu Baoxia: "China To Curb Major Childhood Diseases"]

[Text] Above 85 percent of the Chinese children in towns and villages are expected to be given anti-epidemic inoculations by the year 1995.

And polio and neonatal tetanus, among the major causes of death for children in some remote and poor rural areas, should be eliminated from the country by 1995, according to a national strategy mapped out by the Ministry of Public Health.

The incidence of measles will also drop by 90 percent over the next five years, and the mortality rate from the disease drop by 95 percent, the ministry projects.

It is the third phase of the national campaign to expand immunization among at least 90 percent of Chinese children under one year old before the end of the century.

China successfully expanded its immunization programme to take in 94.75 percent of children under one year old at county level by the end of 1990. That was 9.75 percent above the target which the Chinese Government had promised to the World Health Organization (WHO).

The immunization coverage rate had reached 85 percent of children at the provincial level by 1989.

As a result of the work carried out in recent years, the incidence and mortality rates of the children's major epidemic diseases such as neonatal tetanus, whooping cough, diphtheria and measles have been markedly reduced.

Meanwhile, the ministry is also taking measures to improve fundamental medical and health care services for both children and women.

The goal is to reduce the mortality rate for infants and pregnant women by around 30 and 50 percent, respectively, by the end of 2000. The current figures are about 40 per thousand for infants and 94.7 every 100,000 for pregnant women.

The infant death rate in some remote and poor districts reaches 68 per thousand.

Data show that haemorrhage, puerperal fever (blood poisoning resulting from an infection contracted during childbirth), and heart disease are the major causes of death for women who bear children. About 65 percent of them died at home or on their way to the hospital.

Lack of medical and health care services as well as poor transportation exacerbate the situation, experts said.

Another investigation in 300 poor and remote counties across the country showed that more than two-thirds of the villages are not even equipped with a device to measure blood pressure.

For every professional maternal and child health worker there are 10,600 women and children to care for.

As of 1990, only 45 percent of Chinese children under seven years old had received health examinations in those areas.

The Ministry of Public Health's national plan is to expand health care services, including examinations, education and hospitalization, to reach most women and children by 1995.

About 21 percent of Chinese children suffer from various illnesses rooted in malnutrition, ministry statistics show.

The latest survey among children in nine provinces showed that 47.3 percent are enemic and 32.3 percent have rickets.

Investigations in eight cities indicated that only about 30 percent of newborns are fed by mother's milk, a drop of 50 percent from the 1950s and '60s. The rate for Beijing is 10.4 percent.

Beijing's Incidence of Contagious Diseases Declines

OW2501051292 Beijing XINHUA in English
0442 GMT 25 Jan 92

[Text] Beijing, January 25 (XINHUA)—The incidence of 25 contagious diseases has been on the decline in Beijing for over a decade.

As a result, the average life expectancy for Beijing residents has increased to 75.7 years, an increase of 3.8 years over 1981.

In 1991, the incidence of 25 contagious diseases, including hepatitis, dysentery, typhoid, measles and encephalitis b, declined by 75.5 percent over the 1981 figure.

Tuberculosis, which was once regarded as an incurable disease, has also been brought under control. In 1991, the incidence of tuberculosis in the city was only four per hundred thousand, a decrease by 91.1 percent.

In addition, inoculation for children became a standard practice in 1991, and the city's immunity is number one in the country.

The number of reported cases of food poisoning was a low 5.18 per hundred thousand during the year, and the incidence of endemic goiter is basically under control.

Governments at various levels now stress the importance of epidemic prevention and consider work in that area as one of the appraisal items when considering the work achievements of a unit.

At present, over 6,000 people in Beijing are engaged full-time in epidemic prevention activities.

Drive to Curb Snail Fever

40101011B Beijing CHINA DAILY (National)
in English 26 Dec 91 p 3

[Text] China will earmark 1.11 billion yuan (\$206 million) for the comprehensive control of snail fever nationwide, between 1991 and 1995, according to China New Service.

Five provinces—Hunan, Hubei, Jiangxi, Anhui and Jiangsu—have been selected as the first epidemic areas to get special attention.

According to the five-year scheme, snail fever should be wiped out by 1995 in 279 out of the 378 counties throughout China where the infectious disease is found—74 percent of the total.

Through mass, examination and follow-up treatment, the incidence of the disease in people and animals is expected to drop by 40 percent. The area of snail infested land should be decreased by 392 million square metres within five years.

By the end of October this year, 769,000 out of more than 10 million patients suffering from snail fever had been cured, 13,000 of whom had been in an advanced stage. Some 595 million out of the country's 3.54 billion square metres of snail-infested fields were cleared.

Up to October, cases of the disease in its acute form had been reduced by 57 percent compared with the same period of 1989 and there were only 34 more cases than last year.

In Hubei Province, more than five million yuan (\$925,000) was earmarked for prevention and control and six training classes were arranged in Jiangsu Province.

More than five million people in the country were exposed to the threat of the fever from snail-infested water, when they were struggling against the summer floods.

CAMBODIA

Malaria Kills 11 People in Koh Kong in Nov

*BK2812123191 Phnom Penh SPK in English
0409 GMT 27 Dec 91*

[Text] Phnom Penh SPK December 27—Malaria has badly affected a district in Koh Kong Province after rainy season, causing 11 deaths in November, said a medical worker of the local health care centre.

On average 40 among 100 people in Sre Ambel District, about 270 km west of Phnom Penh, are infected with malaria, especially those who live in mountainous regions and coastal areas, he said.

All medical workers, despite lack of medical equipment and some difficulties, have made efforts to wipe out malaria by giving domiciliary health checks up 4 times a month to people at remote areas, the workers said.

FIJI

Fresh Outbreak of Dengue Fever

*BK0701095892 Melbourne Radio Australia in English
0500 GMT 7 Jan 92*

[Text] Health authorities in Fiji are on alert following a fresh outbreak of dengue fever with five cases confirmed so far. A spokesman for the health ministry, Dr. Isekali Loinkila, says all the cases so far reported have occurred in Fiji's central division.

Dr. Loinkila says health inspectors and public health nurses are visiting the effected area advising people to destroy mosquito breeding areas and take other preventive measures. He added that medical officers throughout Fiji have been advised of the new outbreak of dengue fever.

LAOS

Over 3,000 Afflicted With Malaria in Luang Prabang

*BK1712125291 Vientiane Vitthayou Hengsat Radio
Network in Lao 0000 GMT 17 Dec 91*

[Text] The malaria station of Luang Prabang Province reported that more than 3,000 persons out of over 28,000 who have their blood tested are found to be afflicted with the malaria virus. The station has so far distributed among local people over 240,000 tablets, 350 vials, and 50 bottles of medicines for prevention and treatment of malaria.

Seventy-five Percent of Viangthong Residents Down With Malaria

*BK1101120392 Vientiane Vitthayou Hengsat Radio
Network in Lao 0500 GMT 10 Jan 91*

[Text] Dr. Bounthin, head of the Public Health Service of Viangthong District, Houa Phan Province, revealed that as high as 75 percent of the people in the district have been afflicted with malaria. Blood tests indicated that vivax malaria is prevalent in the area. Unhygienic living conditions in the mountains and remote areas have been attributed to the spread of the diseases. Moreover, the inadequacy of the health service, the lack of medical supplies, and qualified cadres have worsened the situation. There are two hospitals staffed by 16 medical cadres and three health stations in the district.

In 1991 only 30 percent of 9,000 children in the district were vaccinated against diseases. For this reason, more whooping cough cases were reported during this winter. However, it is noticeable that public health work in the district has improved both in terms of quantity and quality during the past few years. The people are well aware of the effectiveness of vaccination against diseases.

Memorandum on Health Assistance Signed With Japan

*BK2301105192 Vientiane KPL in English 0903 GMT
23 Jan 92*

[Text] Vientiane, January 23 (KPL)—The Japan International Cooperation Agency (JICA) in the next five years will render technical assistance and cooperation to Laos's initial basic health service with an aim to improve the service in the central Khammouane Province, the first to start the effort. To realize this, JICA will send its experts to Laos to train Lao personnel along with giving medical assistance and medicine to Laos. This program will be in operation from March 1992 to February 1996 and will be expanded to other provinces if fruitful.

The assistance is stipulated in a memorandum signed at the Ministry of Public Health yesterday between Dr. Khemphet Vanthanouvong, head of the office of the ministry, Mr. Toruise, JICA representative, and Mr. Ziaul Islam, representative of the World Health Organisation in Laos.

The signing ceremony was witnessed by Dr. Vannalet Latsapho, deputy health minister, and senior officials of the Japanese embassy in Laos.

Various Parasites Found Along Mekong River

*BK0901095692 Vientiane KPL in English
0916 GMT 9 Jan 92*

[Text] Vientiane, Jan 9 (KPL)—Cases of Schistosomiasis Mekongi in addition to hepatitis have been found in another district of Champassak Province named Moun-lapamok, according to the survey of health workers of

the malaria, parasitology and entomology institute. Previously Schistosomiasis Mekongi was found only in Khong district.

The survey was launched at 48 villages six kilometres from the Mekong River. The result of the survey shows that 45.50 percent of Hi Hat villagers and 7.10 percent of Khmao Luang villagers are affected by Schistosomiasis Mekongi.

In addition, other intestinal parasites were also reported. In particular, hepatitis was detected at each village. The highest rate of the detection, 91.7 percent, was reported at Hangdon Hangloi village.

Schistosomiasis Mekongi is an infectious parasite living on a kind of mollusc and is capable of infiltrating into a man physically while he/she is taking baths in a river.

MALAYSIA

Health Ministry Reports on Rise of 1991 Dengue Cases

BK1601120492A Kuala Lumpur NEW STRAITS TIMES in English 15 Jan 92 p 10

[Excerpt] Kuala Lumpur, Tues—The number of dengue cases reported to the Health Ministry rose by 73.7 percent from 4,880 in 1990 to 6,618 last year.

Health Minister Datuk Lee Kim Sai said the number of deaths from dengue haemorrhagic fever jumped by 52.5 percent from 21 cases in 1990 to 40 last year and urban areas reported the largest number of cases.

"The Federal Territory is the most dengue prone area and the cooperation from the public is vital in combating this menace," he said.

He therefore called on the public to take the necessary measures to prevent the spread of dengue fever. [Passage omitted]

PHILIPPINES

Typhoid Epidemic in Quezon City

HK2201125992 Manila DZXL Radio Mindanao Network in Tagalog 0700 GMT 22 Jan 92

[Text] A typhoid epidemic broke out again in Payatas, Quezon City. The Department of Health reported that 600 residents are now suffering from the disease. Rose Lleba, City Market Division chief, ordered the inspection of various slaughter houses located in the city to establish whether or not they are following the city's sanitation and health ordinances. The order was in light of suspicions that the disease is caused by pork from pigs that were being slaughtered in unsanitary conditions and were already dead prior to processing.

THAILAND

Incidence of Intestinal Parasites, Liver Flukes

92WE0150D Bangkok DAO SIAM in Thai 1 Nov 91 p 8

[Text] At 1330 hours on 31 October 1991 at the third-floor conference room of the Ministry of Public Health, Dr. Thira Rammasut, the deputy undersecretary of public health, Dr. Surin Phinitchaphong, the director-general of the Department of Communicable Disease Control, and Dr. Suphamit Chunsutthirath, the director of the Communicable Diseases Control Division, issued a joint statement to the mass media concerning "the progress of the liver fluke control program." They said:

Liver fluke disease stems from eating raw fish, particularly fresh-water fish with scales that frequently have small parasites. Such foods include raw fish cut into small pieces, raw minced fish, and preserved fish. Liver fluke disease is particularly prevalent in the northeast. Studies found that 35 percent of the people had this disease. This was because the people here liked to eat raw foods. The Ministry of Public Health became aware of this problem and implemented a program to control liver fluke disease in 1984. There are three main measures. One is to examine stools for parasites and treat people for liver fluke disease. Today, officials are trying to provide this service and treat this disease in communities in every subdistrict in the northeast. The second measure is to encourage every household to have a sanitary bathroom. The third measure is to provide health education, although changing people's behavior is quite difficult. We must continue making the effort. This will take a long time.

In 1989, the Ministry of Public Health launched a program in the northeast to get people to stop eating raw fish and to provide them with some basic health information in order to alert them to the danger of liver fluke disease and get them to change their behavior and stop eating raw fish. As a result of the program, people in the northeast became aware of the problem and started to cooperate. People came for examinations and treatment, with the result that the incidence of liver fluke disease declined from 35 percent to 25 percent.

During the period October 1990-June 1991, the stools of 1,524,448 people in 17 northeastern provinces were examined. Parasites were found in the stools of 265,726 people, or 17.39 percent of the people checked. Of those found to have parasites, 253,789, or 95.51 percent, have been treated.

Ministry Warns of 'Off-Season' Dengue Outbreak

92WE0149A Bangkok DAO SIAM in Thai 13 Nov 91 pp 1, 18

[Excerpts] [passage omitted] Dr. Uthai Sutsuk, an Undersecretary of Public Health, allowed himself to be interviewed after he had inspected the Ratburi Province

Medical Center where many children were being treated for dengue fever. He said that the normal season for dengue fever was between May and September but that this year the rain fell out of season which caused flooding and provided breeding places for mosquitoes. Earlier this year it was found that the incidence of dengue fever was less than last year: it fell from 91,866 cases to 26,590 cases. The incidence this year was 47.88 cases per 100,000 of the population. There were 79 deaths or 0.3 percent. The number of cases in the North rose to put it in first place with 74.17 cases per 100,000. Next came the Northeast with 53.32 cases per 100,000. The South had 24.1 cases per 100,000 of the population, and the central region had 35.62 cases per 100,000. As for individual provinces Mukdahan Province had the highest incidence with 241.72 cases per 100,000.

The Undersecretary of Public Health said that past epidemiological data indicated that the disease went through three year cycles. There had been serious single year epidemics in 1987 and 1990. It was expected that there would be another serious epidemic in 1993 because in 1988 there had been 18,173 cases, in 1989 there had been 42,113 cases while in 1990 there had been 91,866 cases. The latest figures for this year as of 5 November 1991 indicated that there had been 26,950 cases. The incidence of the disease could be reduced if everyone cooperated in its prevention and reduced the number of breeding places for mosquitoes by emptying pools of stagnant water in coconut shells, cans, tires etc. and by closing the covers of water containers. Mosquito nets should be put up for children during the day also because mosquitoes come out to feed during the day. If a child contracted the fever, he should be wiped down to reduce the fever and taken to a nearby medical station or doctor for the proper care because if he were not cared for he might be in danger for his life. One should not buy medicine and administer it oneself because it was very important not to give a child with dengue fever aspirin to reduce the fever.

Dr. Anan Menaruchi, a public health doctor in Chonburi Province, also indicated that of the 242 cases per 100,000 in Ratburi in 1990 most were children between the ages five and 14. [passage omitted]

Dr. Anan said that there were 21 elementary schools participating in this program out of 245. These 21 in addition to using preventive measures related to the life-cycle of the mosquito such as destroying the breeding places for mosquitoes as other schools have done they have also applied the usual method of putting sand in containers with stagnant water and having the students count the number of mosquito larvae every week. Officials checked the results every month. In addition they

sprayed with dust and chemicals to kill the adult mosquitoes as necessary. The results of this were that in 1991 they were able to reduce the incidence of dengue fever to just 45 per 100,000.

VIETNAM

Malaria Kills 290 People in Son La Province

BK1812130291 Hanoi Voice of Vietnam Network
in Vietnamese 1430 GMT 11 Dec 91

[Text] According to an uncompleted report, since the beginning of this year, malaria epidemic has occurred in 93 villages of Son La Province. There have been 41,000 people infected with malaria and 1,600 people with acute malaria which caused 290 deaths, a double increase of deaths in 1989 and 1990 combined.

In the last 11 months, Son La health sector, especially the anti-malaria health stations, has examined and given treatment to nearly 120,000 people. The sector has also sprayed 14,000 households with DDT and soaked 12,500 mosquito nets with anti-mosquito liquid. However, the malaria epidemic is still spreading in the province.

Malaria Spreading Rapidly in Central Highlands

BK1701121192 Hanoi Vietnam Television Network
in Vietnamese 1200 GMT 8 Jan 92

[Text] The central highlands are made up of many mountain provinces, with one half of the population there situated in malaria-infested areas which, including 20 border villages, are considered a breeding ground for the rapid spread of the disease.

Malaria control efforts in the central highlands are facing difficulties because of the local people's backward patterns of living and farming, and also because of travel difficulties encountered in reaching those soldiers and civilians working in new economic zones. This situation has been aggravated with mosquitoes becoming immune to drugs and the grass-roots public health network disintegrating. Almost all village health stations are reported to have not operated on a permanent basis. As travel by road is very difficult, medicine sent down from the center has been held back at various depots of district health offices and is therefore unable to reach villages where malaria epidemics are on the rampage.

A survey has found that the central highlands are an area with the highest rate of malaria infestation. Results obtained from 1990 blood tests for malaria parasites found that up to 16.08 percent of the population has tested positive for malaria in the central highlands. In Lam Dong the figure was 22.13 percent. It is estimated that in the central highlands every year there are some 400,000 people carrying malaria parasites.

Nguyen Khanh Chairs Anti-Malaria Conference

*BK1801130292 Hanoi Voice of Vietnam Network
in Vietnamese 2300 GMT 12 Jan 92*

[Text] Recently in Nghe An Province, Comrade Nguyen Khanh, vice chairman of the Council of Ministers and

Professor Pham Song, minister of public health, chaired an anti-malaria conference for the central region.

The Council of Ministers also approved a grant of 10 billion dong this year for the Ministry of Public Health to purchase DDT, anti-malaria drugs, and medical equipment for fighting the disease.

POLAND

Alarming Growth of Pulmonary Tuberculosis Noted

92P20097A Warsaw GAZETA WYBORCZA in Polish
16 Dec 91 p 3

[PAP article: "Phthysiopneumonologists Give the Alarm; Tuberculosis in Poland is 10 Times Greater Than in the West"]

[Excerpt] Every year in Poland more than 16,000 people are taken ill with tuberculosis, of which over 40 percent

are in the 20-40 age bracket. In Poland, tuberculosis appears ten times more frequently than in most other European countries.

Of every 100,000 middle-aged citizens, 16 die of tuberculosis. Among teenagers aged 15-19, the death rate is 15 out of every 100,000; in the 45- 65 age group, the death rate is 77 per 100,000, and for those over age 65, it is 80 per 100,000.

Experts from the Institute for Tuberculosis and Pulmonary Diseases in Warsaw, the Polish Association of Phthysiopneumonologists, and from the Social Committee to Combat Tuberculosis and Pulmonary Diseases estimate that Poland is 20-30 years behind the rest of Europe in fighting this disease. [passage omitted]

REGIONAL AFFAIRS

Cholera Up on Colombian-Venezuelan Border

92WE0147A Caracas *EL NACIONAL* in Spanish
(Section D) 18 Nov 91 p 6

[Article by Alonso Zambrano]

[Text] Maracaibo—The latest reports from Colombia indicate that the number of suspected cases of cholera in the areas of Bahia Portete, an international port, and Uribia, on the Venezuelan border near Guajira, has risen to 67.

Until yesterday, the figures for these extremely remote areas without communications or transportation and a totally inadequate sanitation system were three dead and 15 persons infected.

Minister of Health Pedro Paez Camargo was in Maracaibo yesterday and joined with regional health teams to evaluate the cholera situation on the border and cooperation which Venezuela is providing to the neighboring country.

Speaking in the auditorium of Maracaibo University Hospital, Paez Camargo officially announced two measures. The first was the sending to the Guajira region of Colombia of a health team to remain in the region as long as necessary to help deal with the cholera problem and, at the same time, design strategies needed to fight the plague from the Venezuelan side.

The other decision made in Maracaibo was the opening of Paraguaipoa Hospital today, equipped to operate as a binational medical assistance center on the border.

The hospital was to open in February, but the minister explained that the emergency which Colombia is experiencing and the deteriorating condition of the medical center in Paraguaipoa made it necessary to move the opening to an earlier date.

The area's water supply is the central issue to be analyzed in the Maicao region by the two health ministers. Paez Camargo said there is a serious problem at the epicenter of the cholera outbreak because Portete is a port having free communication with Panama, which has cases of cholera, and water used locally comes from that country.

Portete has no aqueduct and also receives water from Aruba, so that international implications and the measures needed to control the sanitary situation comprise the main problem to be solved.

Paez Camargo also emphasized that the strategy adopted in Guahira to halt the spread of cholera is that of dealing with the cases where they occur, which prevents transport to other areas unless the situation is of such gravity that the health services of other jurisdictions are required.

Closing Border

The Venezuelan minister said that closing the border does not make sense because the Guayu tribe affected by the disease is a single geographic and cultural unit that feels equally at home in Colombia or Venezuela and has no concept of physical borders.

Consequently, emphasis will be placed on the strategy of locating cases, treating them where they are, and creating a kind of zone of isolation to prevent any spread to other territories of Colombia and Venezuela.

He announced that there will be more intensive control of food transported and consumed in set places so as to prevent any spread of the disease.

Cholera Does Not Frighten Venezuelans

Despite the fact that five days have passed since the outbreak of cholera in the Guajira region of Colombia, Venezuelans traveling to Maicao have demonstrated no fear whatsoever over the presence of the disease in this area of the Department of Guajira. Unofficial estimates obtained in the town of Paraguachon yesterday indicate that between Saturday and Sunday, no fewer than 100,000 persons from different cities in the country crossed the border in the La Raya zone.

ARGENTINA

Menem Closes Bolivian Border Over Cholera in Salta

PY0502141492 Buenos Aires *TELAM* in Spanish
1343 GMT 5 Feb 92

[Text] Buenos Aires, 5 Feb (TELAM)—President Carlos Menem today announced the closure of the border with Bolivia after confirmation that six people died of cholera and 13 others contracted the disease in Salta Province.

In remarks at Government House, Menem said that "the government will use every means at hand to prevent the cholera outbreak from spreading. If necessary, the Army and the Air Force will be asked to help."

Meanwhile, Menem said he had ordered Health and Social Action Minister Julio Cesar Araoz "to quickly go to Salta Province with his aides to take full charge of the situation caused there by the cholera outbreak."

BOLIVIA

Foreign Ministry Says Argentina Will Not Close Border

PY0602030092 La Paz *Television Boliviana Network*
in Spanish 0200 GMT 6 Feb 92

[Text] According to an official Bolivian Foreign Ministry report, Argentina has not ordered the closure of its borders with Bolivia, as reported earlier today.

Reports issued in the last few hours state that Argentina has reportedly closed its borders with Bolivia in view of the cholera epidemic affecting Bolivia.

Bolivian Foreign Minister Carlos Iturralde has stated that these reports are false because, through a note submitted to the Bolivian ambassador, the Argentine Foreign Ministry reports that the Argentine Government has decided not to close its border. On the contrary, it states that Argentina intends to promote joint actions against cholera.

Speaking about the foreign ministers' meeting to be held in Rio de Janeiro, the foreign minister said: [Begin recording]

Iturralde: I am leaving on 8 February, via Sao Paulo, to Manaus, because the foreign ministers' preparatory meeting will be held on 9 February, and the presidential meeting will be held on 10 and 11 February.

Unidentified reporter: What are the issues...

Iturralde: ...(interrupting) The main issue to be discussed in this meeting is ecology and the joint position that we, as Amazon countries, will adopt at the Eco-92 [UN Conference on Environment and Development] meeting to be held in Rio de Janeiro this year. [end recording]

BRAZIL

Country To Produce Vaccines With Cuban Technology

PY2101014692 Brasilia Voz do Brasil Network in Portuguese 2100 GMT 20 Jan 92

[Report by Cleide Lopes]

[Text] Brazil will produce vaccines with Cuban technology. The Health Ministry has signed a technical cooperation agreement with the Cuban Government that will allow Brazil to begin producing vaccines against Type A and Type B meningitis with Cuban technology.

According to Health Minister Alcení Guerra, production of the vaccines may start this year. It has not been decided, however, where the laboratory to produce them will be built.

[Begin recording] We will build a laboratory in Brazil to produce vaccines with Cuban technology. We now are discussing where to build it, and I vote for the Fiocruz [Oswaldo Cruz Foundation]. [end recording]

According to Minister Guerra, Brazil also can produce vaccines against cholera and leptospirosis. The Cuban experts already are experimenting on these vaccines.

Para State—178 Confirmed Cholera Cases

PY0301001692 Brasilia Voz do Brasil Network in Portuguese 2100 GMT 2 Jan 92

[Summary] The latest bulletin from the Health Secretariat reveals that 788 cases of people with cholera symptoms have been reported in Para State, of which 178 cases were confirmed, three are carriers, 397 are considered suspects, and 210 were discarded. Three people have died of the disease so far.

Purchases for Cholera Prevention Campaign Suspended

PY0701164092 Sao Paulo FOLHA DE SAO PAULO in Portuguese 4 Jan 92 p 6

[Excerpt] The government has suspended the purchase of medicines and equipment for the cholera prevention campaign. The measure was published yesterday in the OFFICIAL GAZETTE. The construction of hospitals and first-aid stations with federal government financing has also been suspended. Contracts, bids, and purchases by the National Health Foundation (Funasa) [Fundacao Nacional de Saude] have also been canceled.

Funasa president Baldur Schubert said that "this measure will delay the fight against cholera but it is necessary." The suspension was ordered in the wake of the audit, called to investigate alleged irregularities at the Health Ministry.

Funasa's purchases and calls for bids will be implemented in each state through the regional health secretariats and regional Funasa offices. [passage omitted]

Minister on Collor Plan To Hire 'Agents' To Combat Cholera

PY1101150092 Brasilia Radio Nacional da Amazonia Network in Portuguese 0900 GMT 11 Jan 92

[Text] Health Minister Alcení Guerra announced in Rio de Janeiro the measures that President Fernando Collor has ordered for fighting cholera.

[Begin recording] The president has authorized me to move forward to an earlier date the deadline for hiring 100,000 health agents. The deadline was originally set for 31 December, but now the president has ordered that by 1 July the 100,000 agents should be hired, trained, and on duty. [end recording]

The minister said that the disease is under control, even in the most critical regions like upper and mid-Solimoes, Manaus, and Para state.

COLOMBIA

Cholera Cases Detected in Every Department

92WE0219A Santa Fe de Bogota EL ESPECTADOR
in Spanish 26 Dec 91 p 12A

[Article by Rosario Herrera]

[Excerpt] [Passage omitted] In Colombia, the first case of cholera was identified on 8 March 1991 in the town of Tumaco, a month after the illness had turned up on the Pacific coasts of Peru and Ecuador.

From that time on, the number of cases climbed steadily along Colombia's Pacific coast, and gradually the disease spread toward the interior of the country. Several months later, it reached the Atlantic coast.

Thanks to the measures adopted by national, regional, and local health authorities, however, the number of deaths from the disease was considerably lower than those reported in Ecuador and Peru.

At present, 207 Colombians have died from cholera, out of a total of 11,685 cases recorded throughout the country.

Cholera's Route

According to the National Institute of Health (INS), the only government agency authorized to release statistics on the advance of cholera in Colombia, the disease made its appearance in April in the border town of Leticia. On that occasion, the patient was a native of Peru who had come to Colombia with the bacillus in his body.

By May, health officials became aware of several cholera cases in towns in the departments of Cauca and Valle, and on the 10th of that month the first case was reported in the city of Cali.

The proximity of these regions to the Pacific Ocean caused a dramatic decline in the consumption of seafood, which had a direct impact on coastal fisherman. The population's fear of contracting the disease spread to San Jose del Guaviare, where two cases were reported on 12 April.

In spite of that, the illness appeared to have confined itself to the western part of Colombia; the epidemic spread to the department of Choco, traveled along the Atrato River, and reached the Antioquian region of Uraba in August.

The Atlantic coast was forced to face the consequences of the disease throughout the month of September, particularly in the departments of Sucre, Magdalena, Atlantico, Bolivar, La Guajira, and the San Andres and Providencia archipelago.

According to data provided by the National Institute of Health, Vaupes, Guainia, and Arauca are the only departments that have so far been spared by *Vibrium cholerae*.

How Much Longer?

Cholera will not leave Colombia soon, according experts at the INS, who say that since March the illness has spread along all the expected routes: the Pacific coast, the rivers, the highways, and the towns.

The director of the epidemiology division of the INS, Mancel Martinez, explained that "cholera has come to stay for quite a while. It will remain endemic in some regions, and will disappear temporarily in others. But cholera will be with us for a good number of years."

In fact, the disease can be eradicated only when Colombia has an excellent sanitary infrastructure and the population knows how to deal with organic waste and contaminated water.

Of course, the current situation does not mean that the measures adopted at the time to control the expansion of the disease were wrong. Even the World Health Organization (WHO) emphasized at the international level the success of the strategies adopted by Colombian sanitary authorities to confront the bacillus.

Victims

Statistics supplied by the Health ministry indicate that most cholera victims are adults, and among them, most are male. Nevertheless, explains Mancel Martinez, gradually the pendulum is swinging toward women and children.

This unusual shift is a factor of the epidemic or endemic form of the disease. During the first months of 1991, men were more susceptible to the illness because they worked far from home in places where there was no assurance of proper sanitary conditions, well-cooked food, or potable water. When they return home, they will bring the infection with them, and women and children will be dangerously exposed to contagion.

For the time being, it is known that in the geographic regions of Colombia where cholera first broke out and where there is a deficient sanitary infrastructure and very little formal education, cholera cases will continue to appear. In these regions (the Atlantic and Pacific coasts), *Vibrium cholerae* will be endemic.

Meanwhile, in urban areas where there are water and sewage systems, and in other cities where cholera has not yet appeared, there may be occasional outbreaks of the infection. Then the illness may spread once again.

Cholera Situation in the Country

Department	Cases	Hospitalizations	Confirmed by INS	Deaths
Narino	4,018	1,083	298	60
Cauca	1,903	1,427	120	47
Valle	1,857	1,225	478	12
Choco	1,527	363	196	69
Tolima	209	49	180	1
Huila	60	34	57	1
Bolivar	244	115	187	—
Antioquia	1,030	500	217	15
Caldas	13	5	13	—
Quindio	6	6	6	—
Cundinamarca	8	6	8	—
Santander	27	11	27	1
Cordoba	119	20	119	—
Santa Fe de Bogota	11	3	11	—
Boyaca	22	2	22	—
Risaralda	1	1	1	—
Amazonas	42	7	42	—
Guaviare	2	2	2	—
Meta	1	1	1	—
Sucre	33	13	33	—
Magdalena	227	13	151	—
Atlantico	167	94	157	—
Caqueta	1	1	1	—
Cesar	2	1	2	—
Guajira	49	16	49	1
San Andres	4	1	4	—
Vichada	1	1	1	—
N. de Santander	1	1	1	—
Total	11,585	5,001	2,384	207

COSTA RICA

First Cholera Case Imported From Ecuador
PA1201132492 San Jose Radio Reloj in Spanish
0100 GMT 8 Jan 92

[Excerpt] On 8 January, authorities reported the first case of cholera in the country. The first case was imported from Ecuador. The first patient is a lady, 47, who lives in Alajuela. It was also reported that the patients at the Alajuela hospital are not in any danger of contracting the disease. The aqueducts and sewer office personnel are constantly testing the waters of the Rio Ciruelas and the Rio Grande de Tarcoles Rivers to ensure that they are not contaminated. [word indistinct] must increase the cholera prevention measures. The health authorities will announce the steps Costa Ricans should follow when they visit a country that has registered cholera cases. [passage omitted]

GUATEMALA

Cholera Epidemic Under Control
92WE0209A Guatemala City PRENSA LIBRE
in Spanish 25 Nov 91 p 3

[Text] The plan to control cholera morbus is having the desired effect, since in the seven months since the first outbreak only 400 people have been infected by the epidemic, according to Public Health and Social Assistance Minister Dr. Miguel Angel Montepeque Contreras.

The official pointed out that international health organizations have commented positively on the action plan established in Guatemala, as the epidemic had begun to cause thousands of deaths in different countries in South America.

Montepeque stated that in the first month alone cholera caused a thousand deaths in Peru and a similar number in Brazil. In Guatemala, he emphasized, knowing the

danger of the disease from past experience, preventive measures were taken in every department, which permitted adequate controls.

He recognized that more than 35 people have died from the epidemic, but they were farmers who were taken to assistance centers when the disease was advanced. He pointed out that despite the contamination of Lake Amatitlan and the Motagua River with bacteria causing the disease, so far there have been no exaggerated outbreaks such as those that first worried the health authorities.

The minister stated that there have been more than 400 cases recorded until now, but 80 percent of the patients treated are free of the disease and have returned to their own homes. Cholera control has been successful, thanks to the support of the media and the personnel of various government organizations, Montequete Contreras concluded.

HONDURAS

Cholera Epidemic Worsens; 19 Cases Confirmed

92WE0193A Tegucigalpa *EL HERALDO* in Spanish
23 Dec 91 p 4

[Article by Lourdes Chiu Andrade]

[Excerpt] Choluteca—A total of 19 cases of cholera have been confirmed in the southern zone of the country by authorities of the Ministry of Health. The largest number of persons affected by the disease are in the community of Boca del Rio Viejo-Pueblo Nuevo, Department of Choluteca.

During the past weekend Cesar Castellanos, minister of public health; Alirio Cruz, coordinator of the National Commission Against Cholera; Mauricio Oliva, the director of Sanitary Region 4; and other, local health authorities visited the areas affected by cholera (Boca del Rio Viejo and Colonia 3 de Febrero) to learn about the conditions under which the residents of those areas live and their priority needs in the health area.

When he travelled through the area, Minister Castellanos spoke to the people, including those who had come down with the disease and are fully recovered from it. They received medical attention in time, some of them in their homes and others in the health center in Monjaras, Department of Choluteca.

Over the past weekend four new cases of cholera were recorded, which brings the total so far to 19. The last four persons who came down with the disease are from Boca del Rio Viejo. They are: Natividad Ferrufina Rivera (35), Reina Isabel Jimenez (24), Ines Vargas Reyes (77), and Baltazar Mendoza (52).

The minister of health took advantage of the opportunity to urge residents of the two areas to follow sanitary practices which the Ministry of Health has recommended.

For his part Alirio Cruz, the coordinator of the National Commission Against Cholera, rejected the possibility of decreeing a state of emergency in the southern zone of the country, since the outbreak of cholera up to the present is limited to those two communities in Marcovia, Department of Choluteca.

Nevertheless, the coordinator said that there is some fear that the bacteria causing the disease will spread to other places, since the area presently affected is principally engaged in fishing. Therefore, many people come from other places to this region to buy fish and shrimp.

Cruz repeated that, for the moment, cholera is found in a limited area and, if it is possible to keep it this way, there will be no need to decree a state of emergency in the southern zone of the country. [passage omitted]

PANAMA

District Authorities Report First Case of Cholera

PA1101145792 Panama City Circuito RPC Television
in Spanish 2300 GMT 10 Jan 92

[Excerpt] The first case of cholera in San Miguelito district was detected on 10 January. Mayor Ruben Dario Campos suspended all public activities, including the district's 6th Fair.

The announcement was made by Dr. Jose Paredes, director general of the Health Department of the metropolitan area. He said that the person affected by the cholera virus is Hermogenes Valencia, 54, who lives in the Amelia Denis de Icaza corregimiento, in San Miguelito district. According to preliminary reports, Valencia might have been infected with cholera by eating food from a street vendor.

[Begin Paredes recording] We believe there are more people infected with the cholera virus in the nearby area and the Epidemiologic Surveillance Service is evaluating the area. [end recording] [passage omitted]

VENEZUELA

Officials Struggle to Control Dengue Outbreak

92WE0148A Caracas *EL DIARIO DE CARACAS*
in Spanish 27 Nov 91 p 13

[Article by Carmen Aurora Seijas]

[Text] Dengue, a viral illness that infected 10,962 people and caused 50 deaths in 1989, still poses a threat to the country, with 5,579 victims currently suffering from the disease. The government has not yet formulated a plan to stop the advance of this illness.

The appearance two years ago of the disease, whose symptoms include hemorrhaging, put various groups of Latin American researchers on alert. They know that this disease is endemic in third world countries, and they do not see any vaccine being developed in the short term.

This situation has prompted Roberto Barrera, director of the Institute of Tropical Zoology at the Central University of Venezuela (UCV) School of Science, and his laboratory group to conduct a field study in the communities of Piritu and Puerto Piritu.

They are studying the behavior of residents of this sector with a view to drawing up a plan of action that can be implemented by the community.

According to Barrera, the main problem scientists face in searching for a weapon to combat the disease, either at the breeding level or in infected individuals, is that mosquitoes have developed a resistance to the traditional medications, and the virus is mutant in humans (it changes all the time, as occurs with flu viruses).

There are four types of dengue virus. The virus that causes hemorrhaging had never been seen in Venezuela or in most of Latin America before 1989. But in 1977, when an epidemic of this type broke out in Cuba, it began spreading to other countries in the region.

The hemorrhagic dengue can be described as a fever-inducing illness that causes severe headaches, pain in the joints, muscles, and eyes, rash, and hemorrhaging. There is also a tendency to go into shock, which could lead to death.

The infection can be either asymptomatic or symptomatic. The clinical signs almost always depend on the age of the patient. Infants and young children may have a generalized fever. Older children and adults may have a slight fever, or may come down with the classic debilitating symptoms of the disease: a sudden onset of high fever, severe headache, and joint pain [dolores retroculares]. Hemorrhaging is frequent, so aspirin is not recommended because it is an anticoagulant.

Because no effective medication is available to counteract the effects of this disease, Barrera feels that the best preventive measure is to combat mosquitoes in their breeding grounds and to carry out educational campaigns to teach the population what to do when the illness breaks out.

In Puerto Piritu and Piritu, for example, an experiment is being conducted to test a method of storing water that does not allow mosquitoes to come in contact with it.

"It is absurd to think that people will stop storing liquids, because there is a severe water shortage in the country. For that reason, the safest strategy is to make sure the storage does not cause proliferation."

The project is being implemented right now, and help is being sought from government officials.

Roberto Barrera believes that the results of this project will depend on control measures. The Health Ministry so far has no clear plan of action, because when the yellow fever vaccine was discovered more than 15 years ago (yellow fever is also caused by "aedes aegypti"), the program for controlling that mosquito was dismantled.

The reproductive cycle of the larvae is now being studied at the tropical zoology laboratory. The researchers want to find out at what stage the female mosquito (the transmitter of the illness) is the most dangerous. Once they have obtained that data, they will try to control the dengue-spreading insect.

MSAS Unable to Attack Epidemic

In 1989, when the hemorrhagic dengue epidemic broke out in this country for the first time, the Ministry of Health and Social Assistance (MSAS) put together an emergency multidisciplinary team to try to keep the highest-risk areas under control.

Together with agencies such as Civil Defense, the National Institute of Sanitation Works (INOS), IMAU [expansion not given], and city councils, they launched an eradication campaign, primarily involving spraying cities from the air and cleaning up streams.

In addition, the population was informed of the need to keep covers on tanks and barrels where water for human consumption and household use is stored.

Crews were formed to clean up vacant lots, and it was recommended that dwellings, cupboards, dumps, and waste-storage areas be sprayed with insecticides.

All of these measures were abandoned, however, immediately after the peak infection period passed. People forgot to continue covering water-storage tanks, and garbage began piling up around houses again.

Roberto Barrera feels that this lack of follow-up, education, and monitoring is largely responsible for the fact that the epidemic reappears periodically in third world countries and remains latent there.

BANGLADESH**Correspondents Briefed on Health Situation**

92WE0146A Dhaka THE BANGLADESH OBSERVER
in English 31 Oct 91 p 10

[Text] The intensity of attack and number of deaths by diarrhoeal diseases in the northern districts of the country are coming down, Health and Family Welfare Minister Chowdhury Kamal Ibne Yusuf said in Dhaka on Wednesday, reports BSS.

"The government has launched its biggest ever health operation to contain the hazardous health situation in the northern districts caused by the post-flood condition" he told the Bangladesh overseas Correspondent's Association (OCAB) at a briefing session.

The Health Minister said so far 2,237 persons died of diarrhoea in the northern and some other districts since 1 September, this year, while the number of people attacked by the disease during the same period stood at 163,691.

Mr. Yusuf said outbreak of the disease was a common feature in the country after floods and added that the situation was now fully under the control of the government.

There is satisfactory stock of medicines for the purpose and many medical teams are working in the affected areas, he said.

Speaking about the overall health policy of the government, the Health Minister said primary health care to all constituted the cornerstone of the government's health policy. He said 100 projects including 53 new ones would be taken up during the current fourth Five-Year Plan to meet the objective.

He said Taka 2,777 crore had been earmarked for development of the health sector during the period of which 4.5 percent for population control and 2.8 percent for health care would be spent out of a total 7.3 percent of the budget meant for health and population control.

The Minister said the government was receiving good response from World Bank and donor nations for assistance in the health sector since a democratic government had now been installed in the country.

He said that a new health policy for securing a better health and family welfare condition was on the anvil.

Replying to questions, the Minister said the people of the country had rejected the health policy of the previous autocratic regime and the present democratic government was formulating such a policy that would be in conformity with the aspirations of the people.

He told a questioner that the government would not allow marketing of harmful drugs in the country and said it would encourage foreign investment here and operation of the multi-national companies for production of beneficial drugs.

Deaths from 'Mysterious Fever,' Diarrhea Reported

92WE0169A Dhaka THE NEW NATION
in English 16 Nov 91 p 11

[Text] Sylhet, 14 November—A mysterious fever with convulsion has broken out sporadically in six villages under Company ganj upazila on Sylhet district. The disease claimed 22 lives during the last 10 days, it is reliably learnt.

According to available reports, in most cases, the victims were thrown into violent spasmodic contractions following sudden rise in temperature of the body and saliva oozed out of their mouths and died subsequently.

Mr. Tayebur Rahman chairman of the upazila said the situation might get worse if preventive measures were not taken immediately.

Ten Die of Diarrhoea in Magura

Diarrhoea claimed 10 lives and attacked about 400 people last month in three upazilas of Magura district, reports UNB.

The affected villages are: Tikarbila, Debinagar, Bilnathur, Borishat, Boralidah in Sreepur upazila, Parla and Satrujitpur in Magura sadar upazila and Chandra in Salikha upazila of the district.

According to the Civil Surgeons's office, out of the total: Seven persons died in Sreepur, two in Magura and one died in Salikha upazila.

Those who died were: Saloka (85), Ashok Kumar (5), Shampa (4), Hafizer (35), Anzooara (6), Habibul (5) and Aminuddin (50) in Sreepur upazila. Maink (20) and Satadal (40) in Magura sadar and Seuly (4) in Salikha upazila.

The sources said that medical teams and medicines had been despatched to the affected areas.

Meanwhile at least eight persons died during the last 24 hours in four upazilas raising diarrhoeal death toll to 45 in Sirajganj.

Unofficial figure of death due to water borne disease in last ten days, however, stood at 113.

Local administration said 2,800 people have been attacked by diarrhoea during the period. Unofficial sources put the figure to more than 18,000 with nearly 500 affected in the last 48 hours.

District Civil Surgeon informed that 127 medical teams were working in the affected areas.

Tuberculosis Incidence Rises in South

92WE0171A Dhaka THE NEW NATION
in English 27 Nov 91 p 12

[Article by Abul Hasan: "TB Patients on Rise in Patuakhali"]

[Text] Patuakhali—TB patients are on the increase in southern region of the country. According to the informed sources, unawareness about the causes of TB is the main reason for rapid spread of the disease.

According to a survey report, 40 percent patients have been attacked with this disease through regular association with TB patients and the rest 60 percent for smoking and other reasons.

Dr. Shah Alam, Medical Officer, Patuakhali TB clinic told this correspondent that there are more than 50 lakh [5,000,000] TB patients in the country while about 80,000 of them die every year.

About 30 to 35 TB patients are being treated in Patuakhali TB clinic everyday.

A clinic source said that the disease is spreading through cough and saliva of the affected persons.

Need To Combat Viral Hepatitis Stressed

92WE0170A Dhaka THE NEW NATION
in English 5 Dec 91 p 3

[Text] Deputy leader of the parliament Prof. AQM Badruddoza Chowdhury on Wednesday called upon the medical professionals to create wariness among the people about hepatitis disease, reports UNB.

He was speaking at a national seminar on 'Viral Hepatitis' at a local hotel on Wednesday.

Organised by a health education organisation "Eso Shashter Katha Bali," the seminar was addressed by Principal, Bangladesh Private Medical College Prof. M.I. Chowdhury, Prof AKM Kamruzzam MP, head of the Department, Virology of IPGMR Prof. Nazrul Islam, Director, BIRDEM Prof. A.K. Azad Khan and head of the Department Gastro-Anterology, IPGMR Prof. Mahmud Hasan.

Prof. Mobin Khan, head of Liver Department, IPGMR presented key-note paper at the seminar.

About one crore [10 million] people of the country are suffering from various kinds of liver diseases, Prof. Chowdhury informed.

While talking about the global scourge of AIDS he opined only health education can help tackle such health issues.

Referring to blood which transmit the hepatitis disease at various levels, Prof. Chowdhury suggested to check blood of donors and also called for mandatory use of disposable syringes to help check the spread of diseases.

Prof. Chowdhury, an eminent physician, stressed the need for extensive research for finding out probable routes through which hepatitis spreads.

He also suggested to immunise health professionals including doctors and nurses, who are responsible for spreading the diseases.

The present government pioneered in setting up heart, cancer, ophthalmology, kidney institutes in the country, he said and assured of government's assistance towards setting up an institute of immunology in the country.

Responding to a proposal placed at the seminar to incorporate hepatitis vaccination in the EPI programme, Prof. Chowdhury said the government has no such plan as it would cost much.

Addressing the seminar, Prof. Azad Khan stressed the need for acquiring genetic engineering technology to produce vaccines locally to combat the disease.

Prof. Mahmud Hasan suggested formulation of a vaccine strategy and immunising new-mother to prevent baby from the viral hepatitis attack.

Refuting various indigenous treatments, Prof. Hasan prescribed proper diet and rest as the only medicine to fight the disease.

A survey conducted in country's five medical college hospitals during May-October this year, shows about 7 percent of the patients suffering from liver disease, caused by hepatitis.

About 90 percent people in the country are attacked by hepatitis "A" virus during their life time, speakers in the seminar said.

While, about 5 to 10 percent of the country's population are now carrying hepatitis "B" virus, they further said.

'Alarming Increase' in Elephantiasis Noted

92WE0228A Dhaka THE NEW NATION in English
8 Dec 91 p 11

[Article by N. M. Jahangir Alam: "Patients Depend on Quacks for Treatment; 1.5 Lakh Suffer From Elephantiasis in N Dist"]

[Text] Thakurgaon: Elephantiasis disease in Panchagar, Thakurgaon, Dinajpur, Kurigram, Lalmonirhat, Gaibandha, Rangpur, Joypurhat, Naogaon, Nilphamari and Chapainawabganj districts has alarmingly increased. About 1.5 lakh people in these 11 districts have been suffering from this disease. The facilities for detection and treatment of the disease in the region have been very meagre. The number of elephantiasis patients is swelling day by day mainly due to unabated mosquito menace.

In the first stage this disease cannot be detected; some days after some parts of the body of the patients start swelling like tumour and creates hindrances to movement. Sometimes patients become disabled.

It is reported that due to lack of funds, Filaria Research Institute at Thakurgaon which was set up in 1967 remains closed. The institute was set up at the initiative of World Health Organisation. But after the Liberation War in 1972 this institute could not continue its activities for want of funds.

It is alleged that there is no scheme to combat the menace of filaria which is caused due to bite of quelex mosquito.

In the absence of proper treatment the patients are passing their days just by taking medicines from the quacks.

According to a report by Malaria Institute, it is found that about 14.81% people of greater Dinajpur district have been attacked by Filaria.

According to experts, there is no preventive measures for this disease. But the authority can take steps to stop the menace of quelex mosquito by spraying anti-mosquito drugs and clearing ponds.

INDIA

Medicine Shortage in Tripura, Enteric Disease Spreads

92WE0164A Calcutta THE STATESMAN
in English 5 Nov 91 p 9

[Text] Agartala, 4 Nov—The spread of enteric disease has taken an epidemic form mainly in the hill areas of Tripura's North and South districts while primary hospitals and rural health centres are facing an acute shortage of life-saving medicines. A senior State official, however, said that the Government was yet to assess the situation while "emergency medical teams have been rushed to the North district areas."

A delegation of CPI(M) [Communist Party of India-Marxist] leaders which earlier met Mr. Harinath Devbarma, the chief executive member of the Tripura Tribal Areas Autonomous Districts Council, said here yesterday that at least 200 tribal villagers, mainly children, had died in epidemic during the past several weeks. An acute shortage of food and drinking water in the hills aggravated the problem. At least 97 tribals had died of enteric diseases at the Chhamanu block of North district alone, the delegation said. The CPI(M) State secretariat has earlier urged the Tripura Government to declare an epidemic in the hills and take measures immediately to do away with the menace. According to senior leaders of the ruling TUJS [Tripura Upajati Juba Samiti], the epidemic has taken a toll of over 100 lives in Tripura's North district so far.

Meanwhile, the CPI(M) State secretariat has in a statement vehemently opposed the Chief Minister, Mr. Mazumder's "arbitrary decision" to enhance the price of foodgrain and salt.

Increase of Typhoid Reported in Madras

92WE0213A Madras INDIAN EXPRESS
in English 21 Nov 91 p 1

[Article: "Typhoid on the Rise in Madras"]

[Text] The incidence of typhoid is on the increase, a random check with several doctors, government hospitals and clinical labs has revealed.

It is said patients are not responding to Chloromycitin, the low-cost, conventional anti-typhoid drug. The drug prescribed now is Ciprofloxacin which costs about Rs.12 a capsule and has to be taken thrice a day for at least a week.

The weaker sections are the worst affected as Ciprofloxacin is not allotted to government hospitals. Some government doctors do prescribe this drug and advise their patients to buy it elsewhere. Those admitted to hospitals are allowed to remain there for weeks till they get well with rest, food and conventional treatment.

Typhoid is one of the 20 notifiable diseases and every medical practitioner is required to report daily to the City corporation health department the cases coming to them. This is to help the department make periodical assessment of the situation to know whether there is any spurt in the incidence of any communicable disease.

Enquiries with Corporation sources show that even government hospitals do not report such cases to the health department.

According to a City doctor, at least three to five patients with symptoms of typhoid come to him for consultation every day. He is of the opinion that this being basically a fecal oral disease, prevention of contaminated water from getting mixed up with drinking water will, dramatically bring down the number of cases. Now that the storage position in the drinking water reservoirs is comfortable, maintaining full pressure inside the pipes would check the flow of sewerage into the pipes.

People using hand-pumps to draw water from the mains run a greater risk, according to this doctor. The suction would lead to increased flow of sewerage into the pipes. Slum-dwellers are more exposed to this risk.

Minister Gives Statistics on Diseases in Delhi

92WE0214A New Delhi PATRIOT in English
4 Dec 91 p 5

[Article: "72,539 Deaths in Hospitals in 3 Years"]

[Excerpt] A total of 72,539 deaths were reported in 17 major hospitals of Delhi including, All India Institute of Medical Sciences between 1989 and October 1991, Union Deputy Health Minister D. K. Thara Devi Sidhartha, informed Parliament on Tuesday, report agencies.

In a written reply to Mr. S. Shastri and Mr. M. L. Khurana, she said the Safdarjang Hospital had the highest death figure of 5006 in 1989, 5703 in 1990 and 4773 in 1991 following by Lok Nayak Jaiprakash Hospital—4395 in 1989, 4999 in 1990 and 2161 in 1991.

She said no postmortem is conducted to ascertain the cause of each death in the hospitals except in medico-legal cases.

Dengue fever: She told Mr. V. N. Patil that the highest number of malaria and dengue fever cases were reported in 1988—14,423 and 22,697 respectively—in Delhi.

Mrs. Thara Devi said that the Capital registered 10,240 cases of malaria and 406 cases of dengue during the current year so far.

Various measures have been initiated to counter the spread of malaria and dengue cases, she said. [Passages omitted]

Cerebral Malaria, Typhoid Epidemics in Maharashtra

92WE0210A Bombay THE TIMES OF INDIA
in English 5 Dec 91 p 4

[Article: "Lack of Precaution Led To Epidemic"]

[Text] Nagpur, Dec 4 (PTI): The epidemics of cerebral malaria and typhoid, which occurred in Penn in Raigad district recently, were caused by inadequate spraying of insecticides and faulty drinking water distribution system, the Maharashtra minister of state for health, Mr. Digvijay Khanvilkar, told the legislative assembly here today.

Replying to a calling-attention notice tabled by the leader of the opposition, Mr. Manohar Joshi and 28 others, Mr. Khanvilkar said 1,499 persons were affected by cerebral malaria, out of which four died, and 283 by typhoid, in the epidemics which broke out in September this year.

The monsoon having ended in August, the mosquitoes which were normally washed away in torrential rains remained. As the incidence of Malaria was less than two per 1000, no spraying of DDT was done which resulted in the outbreak of cerebral malaria, he said.

Mr. Khanvilkar detailed the remedial measures and precautions taken to arrest the spread of the epidemics. Epidemics of gastroenteritis at Shahapur in Thane district and typhoid at Lanja and Rajapur in Ratnagiri district occurred this year and remedial measures were taken, the minister said.

IRAN

Disease Outbreaks Due to Illegal Entry of Afghans

92we0142b Tehran ABRAR in Persian 10 Nov 91 p 9

[Text] The spread of infectious and contagious diseases caused by the illegal entry of Afghan emigres into Iran and their failure to observe the principles of hygiene has threatened the health of the people and the environment in the eastern parts of the country.

This statement was made at a meeting of the Khorasan Province Health Council by the chiefs and deputies of the province health care and treatment network.

Mohammadizadeh, deputy governor-general of Khorasan for planning, discussed the great swarm of Afghan emigres into our country. He said: About 3.5 times the number of Afghan emigres living in the camps are scattered in cities in parts of the province, and in some places the population makeup of cities and villages has changed.

'Ali Akbari, official in charge of foreign citizens in the governor-general's office, said that there are about two million Afghan emigres in our country. He said: Of this number, 600,000 emigres with identification cards are kept in quarantine camps at Mashhad, Birjand, Torbat-e Jam, Taybad, Fariman, Kashmer, Sabzevar, Khawaf, Qa'en and Nahbandan, and the rest are scattered illegally across the country outside of any kind of health care controls.

He added: A high percentage of these emigres, with previous backgrounds, are afflicted with mild and severe cases of malaria.

Dr. Mir Hoseyni, executive director of the province health care network, declared that the hope of the World Health Organization to wipe out malaria has not been realized. He added: The reason for this is the failure to procure the financial assistance from some countries for the project to wipe out the disease, and because of the resistance of the bacteria for this disease to the poisons in the treatment drugs, this organization has put its hopes in the new technology to find a vaccine against this disease.

He mentioned the low level of Afghan culture in observing the principles of hygiene and their disregard for personal and social hygiene as one of the main problems. He said: A great many emigres enter the country illegally, and with their heavy traffic in the cities they carry diseases such as tuberculosis, measles, leprosy, and intestinal diseases.

At this meeting health care officials of the municipalities of Birjand, Torbat-e Jam and Taybad discussed the problems arising from the spread of Afghans through the area and the spread of contagious diseases such as rabies, dysentery and other diseases.

A Torbat-e Jam health care official said: In the first seven months of this year [21 March - 22 October 1991] 300 Afghan emigres were bitten by rabid dogs and treated for rabies.

He added: Every new round of vaccinations costs 50 to 60 thousand rials and this costs our country enormous amounts of foreign exchange and rials to treat the Afghan emigres.

At this meeting, in view of the fact that a high percentage of the Afghan emigres are not involved in the fight against the Kabul regime and see Iran as a good haven for comfort, investment and accumulating wealth and are the cause of many problems in the country and in the area, they asked that suitable conditions be created for the return of emigres to their country.

Number of Malaria Cases Increasing

92WE0142C Tehran ABRAR in Persian 11 Nov 91 p 5

[Text] Despite persistent efforts to prevent and wipe out malaria, this disease has continued to spread in the years 1365 [21 March 1986 - 20 March 1987] to 1369 [21 March 1990 - 20 March 1991], and based on statistics from the Ministry of Health, it has roughly doubled.

The ISLAMIC REPUBLIC NEWS AGENCY reports that based on statistics from the General Office to Fight Contagious Diseases, in 1365 sixty nine out of every 100,000 Iranians were infected with malaria. In 1366 [21 March 1987 - 20 March 1988] this figure reached 72, and it reached 99 in 1367 [21 March 1988 - 20 March 1989].

According to these statistics, the number of those infected with this disease continues to increase, to the point that in 1368 [21 March 1989 - 20 March 1990] the number reached 106, and then in 1369 it went up to 137 per 100,000 of the nation's population.

According to these statistics, in Tehran Province malaria declined during the years for which the statistics were taken, so that in 1365 twelve in every 100,000 were infected with malaria, and this number dropped to nine in 1369.

This disease comes about as the result of the bite of the anopheles mosquito, which lives in swamps. There are various varieties of it, which cause cycles of fever and with a special variety called vivax there is the possibility of death.

As the result of infection with "Plasmodium", or malaria, this disease attacks the red corpuscles and breaks up and dumps into the blood the internal materials, including the hemoglobin, creating in the victim anemia, enlarged spleen and chlorosis, gradually disabling him.

Experts say that malaria spreads because of the failure to disinfect swamps and ponds, the failure to observe environmental hygiene, and the failure to monitor foreign emigrants.

Immigrants Blamed for Spread of Contagious Diseases

92AS0410Z Tehran SALAM in Persian 17 Nov 91 p 2

[Text] The chief of the tropical disease section of the World Health Organization described the malaria situation in Iran and the prevention measures being taken in this area as satisfactory.

Dr. Mohammad Cheraghchi, general manager of the Anticontagious Diseases Office, said: After the triumph of the Islamic revolution, because of the government's concern for the need to uproot malaria and in view of the investment that has been made to research the reasons for the spread of this disease, the statistics compiled in the past on the spread of malaria have increased.

He explained: Technical statistics show an increase from the past, and the reason for that is the attention to research and study in this area.

The general manager of the Anticontagious Diseases Office said: Other than the five municipalities mentioned, in the rest of the country there is one malaria case per 10,000 persons. The reason for its spread and transfer is emigrants with foreign citizenship living in Iran.

He added: To prevent and uproot malaria, in the current year about 30 billion rials credit has been allocated.

Concluding his remarks, Dr. Charaghchi said: Dr. Nakhehbra, chief of the tropical disease section of the World Health Organization, has also confirmed this.

Majority of Afghans' Domesticated Animals Diseased

92WE0142A Tehran ABRAR in Persian 9 Nov 91 p 9

[Excerpt] Of the some 600,000 head of livestock brought into the country annually by Afghan emigres, 80 percent are infected with various livestock diseases.

The ISLAMIC REPUBLIC NEWS AGENCY reports that this statement was made by a Khorasan Province veterinary expert at a meeting at the governorate of Birjand attended by Engineer Qabutu, technical consultant to the United Nations Agricultural Development Bank. He said: Livestock diseases are not controlled in Afghanistan, and this means that with the transfer of livestock from Afghanistan to Iran, which is being done by the Afghan emigres, 1.5 million head of livestock in the Municipality of Birjand are threatened with livestock diseases.

Amiri Moqadam, governor of Birjand, added: Eighty percent of the residents of the Birjand border belt are Afghan refugees, and over the last ten years their presence has caused the destruction of 60 to 70 percent of the pastures in these areas.

He added: The revitalization of these pastures, estimated at 825,000 hectares, will cost more than 28 billion rials.

The governor of Birjand asked the United Nations Agricultural Development Fund for help in revitalizing these pastures. He said: The revitalization of these pastures will mean that the Afghan emigres in these areas will be more comfortable.

It is necessary to note that during his three days in the areas of Birjand and Qa'en, Engineer Qabutu, technical consultant to the United Nations Agricultural Development Bank, visited the natural forests of these areas which have been destroyed by the Afghan emigres. [passage omitted]

IRAQ

TV Interviews Minister on Health Situation

JN2301144192 Baghdad INA in English
1355 GMT 23 Jan 92

[Text] Baghdad, Jan 23, INA—Minister of Health, Dr. Umaid Midhat Mubarak said the U.S. led aggression against Iraq has intensively targeted the country's hospitals, other health facilities and water purification stations to hamstringing the provision of curative and preventive services.

In an interview on Iraqi TV on Tuesday, the minister said the crime perpetrated against Iraqi patients is represented by the bombardment of power generating stations, adding that without electricity hospitals were forced to halt basic services such as surgeries and blood transfusion.

The minister went on to say that allied forces have attacked and destroyed warehouses that hospitals rely on in providing the necessary calories to patients.

As regards the huge pressure exercised by the U.S. and its allies on drug companies to block shipments of medicines that Iraq paid for advance from reaching the country, the minister said that as a result of the pressure, the drug firms refrained from sending medicine to Iraq, thus causing severe shortages of medicines and medical equipment which have in turn led to the death of a large number of Iraqi children and people.

The minister referred to a report conducted by Harvard study team who visited the country recently, saying that the report indicated that Iraq's health sector is now facing a critical situation represented by a noticeable increase of diseases due to shortages of medical equipment and medicines as a result of the imposition of sanctions on the country. He added that the report which was conducted around the end of 1991 anticipated the death of some 170,00 children by the year 1992.

Dr. Mubarak went on to say that reports conducted by the United Nations Children's fund (UNICEF) indicated a five to 12-fold increase in epidemics, as well as a high rate of cholera and typhoid, causing high mortality rate among Iraqi people.

He elaborated that before the war, Iraq managed to almost eradicate polio cases, but now, due to severe lack of food and vaccines because of the embargo, poliomyelitis recorded a high rate among children, indicating that Ministry of Health has reported the death of some 33,000 children under the age of five over the period from August 2, 1991 until December 1991.

The minister also refuted claims and allegations of Western media regarding incubators in Kuwait, saying that Iraq offered medical services to Kuwaiti people and send doctors medical staff there.

YEMEN ARAB REPUBLIC

Cholera Epidemic Said To Overwhelm Medical Facilities

92WE0065A Cairo AL-AMAL in Arabic
October 91 pp 19, 31

[Article: "Cholera Sweeps Yemen, Hospitals Unable To Admit Stricken"]

[Text] Conditions in those governorates are aggravated by the total collapse of basic services, especially sewage facilities. The sewers are overflowing in most places, and houses and streets are flooded. There are even some streets almost completely closed and impassable. Other areas are afloat over lakes of sewage and the people have a difficult time getting to and from work and going about their business. Foul smells abound and make it difficult to breathe. Swarms of flies and mosquitoes fill the air and invade the houses, where they alight on food and further aggravate the crisis!

Indeed, there has been no change despite government promises and placating official statements meant for [local] consumption, and despite reports of budget allocations to construct a modern sewer network and update sewage processing. But circumstances stay the same, without any improvements to lift this curse that afflicts the people at the hands of a government busy with everything except improving the people's situation and the worn-out utilities.

The catastrophe that is engulfing the southern governorates today was inevitable under these conditions of government negligence and almost-criminal inattention. The authorities stand helplessly before the people, and the people are at a loss for what to do, to whom to appeal, or where to escape this hideous epidemic!

Early warnings of the catastrophe appeared in the governorates of al-Mahaq and Hadramawt, where several citizens fell victim to the epidemic. During the first few days of the epidemic, the authorities imposed a news blackout and tried to conceal the facts from the people. They denied the existence of cholera, claiming that what happened was a few cases of gastrointestinal dysfunctions common this time of year. But the truth surfaced a few days later when the number of cases multiplied and

the lack of treatment facilities caused fatalities. The Abyan Governorate was stricken the hardest as the epidemic spread horrifically, especially in such high-population centers as Khanfar, Ji'ar, al-Musaymir, and the capital city of Zanjabar. The fatality ratio was high and was definitely attributed to Cholera, not to some seasonal intestinal bug, as the authorities claimed in their obvious attempt to hoodwink the people and dupe them about a serious matter deeply affecting their lives.

The tragedy did not stop there. Medical and health conditions in the south unveiled one farce after another. It was found out, for instance, that the year's medical laboratory allocations for those governorates had not arrived from the Ministry of Health in San'a. Those allocations ranged from 65,000 to 80,000 dinars for 1989, and shrank by about 25 percent in 1990, rather than being boosted to support regressing health conditions.

Laboratory testing also revealed that the spread of cholera in the south was accompanied by the incidence of typhoid. These cases were confirmed by the Misahhat al-Salam mental hospital in the city of al-Shaykh 'Uthman in Aden Governorate. The plot thickens when a secret investigation reveals that the virus was found on the two cooks working in the hospital!

The tragedy reaches a climax when cholera-stricken patients arrive at the hospital doors, practically unconscious as a result of constant vomiting and diarrhea, and are turned away because there are no empty beds. Worse, some are admitted to meet their unavoidable destiny in

institutions that have no serum, medicine, drugs, laboratory supplies, or even aspirin tablets—nothing at all, except the grim reaper, who grabs everyone who enters the hospital. The families of victims ask about the cause of this farce, only to be told by hospital officials that they lacked the funds to procure needed medicine.

This is an ordeal in the full sense of the word, and at a time when the people see with their own eyes how their rulers live lavishly and luxuriously, ride in fancy cars, live in elegant villas and apartments at home and abroad, and spend extravagantly on frills and non-essentials. When they [the rulers] get sick, medicine is airlifted for them from abroad, or they travel to the world's largest facilities for treatment at the expense of the state.

Incidentally, these days the state is seriously considering closing some government hospitals to get rid of the headaches they cause senior officials. They would sell them to the private sector, which would then be responsible for their problems, and the people would stop their griping and complaining. The government has failed dismally at managing and operating those hospitals, which have practically turned into ruins.

A new black epic in the history of corruption, deviation, and despotism is today being recorded by the cholera epidemic that is now crushing dozens in the south, by the funeral columns that pass every day in view of all the people carrying the victims of that serious epidemic, and by the moans of the bereaved and the cries of those who lost their loved ones.

A person may be patient for a while, and may wipe away his tears and lick his wounds for a time, but the day will come when he strikes back. He will know then how to crush his despots and avenge his suffering!

Tick-Borne Encephalitis in Novosibirsk

92WE0180B Moscow POISK in Russian
No 21, 17-23 May 91 p 2

["Beware of Ticks: Stay Out of the Forest". First paragraph is POISK boldface introduction]

[Text] But neither the patriarch of all Russia nor the all-mighty dollar can save Novosibirsk Akademgorodok from the already habitual disaster: tick-borne encephalitis.

In 1991, according to analysis by the medical directorate of the Siberian Department, USSR Academy of Sciences, "the epidemiological situation for tick-borne encephalitis in Novosibirsk Oblast is expected to worsen." Whereas in the past year the number of Novosibirsk inhabitants suffering from tick bites rose by 64 percent and the morbidity with tick-borne encephalitis increased 2.5-fold, this year we need to prepare for worse, since the number of ticks themselves, the carriers of encephalitis, is expected to increase by 1.5-fold.

Since gamma-globulin, which is necessary for the encephalitis vaccinations, is not available in the city, the employees at the anti-epidemic station can only recommend that people stay out of the forest.

Influenza Epidemic in Ulan-Ude

92WE0180A Moscow ROSSIYSKAYA GAZETA
in Russian 28 Dec 91 p 1

[Excerpt] Earlier than usual, as of yesterday, the traditional winter vacations began for children in the capital of Buryatii. They will last through the thirteenth of January rather than the ninth: there is an influenza epidemic in Ulan-Ude.

Flu Epidemic Strikes St. Petersburg Children

LD1401200892 Moscow Radio Rossii Network
in Russian 1100 GMT 14 Jan 92

[Text] The children of St. Petersburg will probably have to have their holidays all over again. A flu epidemic is overwhelming the city. The figures for the number of cases among children is approaching 15,000. According to forecasts, the peak of the epidemic will come in the last ten days of January. It is also expected that 13 to 15 percent of the adult inhabitants of St. Petersburg will suffer from the illness.

Health Official Says Influenza Epidemic Still Not at Peak

OW2401170492 Moscow BALTFAX in English
1435 GMT 24 Jan 92

[Following item transmitted via KYODO]

[Text] The influenza epidemic which has infected Latvia has not reached its peak yet. Chief expert of the Republic's Health Department, Mr. Shubin, told BF

[BALTFAX] that according to forecasts, the epidemic will grow for about two weeks and, after February 12, will subside.

He also said that Riga was infected the worst.

Water Blamed for Typhoid Cases Registered in Chelyabinsk

LD2301185492 Moscow Russian Television Network
in Russian 1100 GMT 22 Jan 92

[Text] Cases of typhoid have been registered in Chelyabinsk, the oblast newspaper CHELYABINSKIY RABOCHIY reported. A total of five foundry workers were taken to the infectious department of the city's hospital, two are in serious condition. It is assumed that the water is the source of the infection.

Chelyabinsk Workers Contract Typhoid Fever

PM2701131592 Moscow IZVESTIYA in Russian
23 Jan 92 Morning Edition p 1

[Report by Georgiy Shcherbina under the "From Our Correspondents and World Agencies" rubric: "Typhoid Fever Infection Source Emerges in Chelyabinsk"]

[Text] The first victims were several workers at the "ChTZ imeni V.I. Lenina" Production Association, who, as the health and epidemiological service established, drank non-potable water during a shift. It is piped into the shops from the Miass River, into which unpurified industrial and domestic waste water is continuously discharged.

Leptospirosis in Chernovtsy

92WE0088A Kiev RABOCHAYA GAZETA in Russian
14 Sep 91 p 2

[Article by D. Maksimets, Chernovtsy; under the title: "One More 'Chernovtsian' Disease"]

[Text] The flood which caused not a few disasters in Chernovtsy Oblast at the end of July exploded in an outbreak of a disease like leptospirosis. The disease is characterized by a sudden high temperature, fever, muscle pains, and jaundice. It is caused by water infected by diseased rodents which have gathered in particular places. As a result, those who helped save people and animals have suffered above all.

Fifty-four patients suspected of leptospirosis were hospitalized; the diagnosis was confirmed in 27. They underwent a course of treatment. One individual died.

"We have now succeeded in containing the spread of the disease," said L.M. Onasenko, the Chief Physician of the Chernovtsy Municipal Sanitary-Epidemiological Station. "Disinfection of wells and chlorination of water is being carried out. We are explaining to people how they may prevent this calamity: wash vegetables and fruits, and don't go barefoot. The most important thing is that

it is necessary to bring down the level of water which remains at sites of flooding."

Rise in Syphilis Cases in Tverskaya Oblast

92WE0093 Moscow *LESNAYA GAZETA* in Russian
19 Oct 91 p1

[Article with no byline, dateline Tverskaya Oblast: "Behind the Back of AIDS"]

[Text] The number of syphilis patients in Tverskaya Oblast has grown more than twofold. The largest contingent of patients consists of young people between the ages of 20 and 29, but there are some minors among those infected. Venereal diseases of a pernicious nature are being recorded more and more often. The medical profession is warning against a higher probability of infection with syphilis this very year, because, according to medical science data, the activity of the agent of that disease rises every 11 years. The last time such an outbreak was observed was in 1979 and 1980. This year represents the next peak.

Diphtheria in the Ukraine

92WE0092A Kiev *PRAVDA UKRAINY* in Russian
1 Oct 91 p 4

[Article by Viktor Mariyevskiy, First Deputy of the Chief State Sanitary Physician of the Ukraine: "At First Hand - Diphtheria Is No Joking Matter"]

[Text] Thirty-one people, including nine children, who died in the present year alone from diphtheria, are the sad consequences of the increasing incidence of this acute infection in the republic, the eradication of which had not so long ago seemed beyond doubt. Moreover, speaking frankly, were it not for the extraordinary measures for prevention which had been worked out in the Ukraine on the initiative of the Minister of Public Health of the Ukraine, Yu. P. Spizhenko, the catastrophe would have been even more horrendous.

The increase in the incidents as we have repeatedly reported in the past, began in the autumn of 1990. However, a fair amount had already been done in the preceding months to prevent the disease. About a half million children in the first year of life have been immunized against diphtheria, and reimmunization had been carried out of almost eight million individuals. The scope of this effort was substantial. However, the purpose of this article is not a report of efforts already made, but an explanation of the reason for which they were and are necessary. In accordance with the recommendations of the WHO [World Health Organization] for diphtheria prevention, not less than 95% of children aged up to a year should be immunized, and subsequently 98% of the population should be reimmunized. Only such an approach is capable of creating a priming of immunity, i.e., a high level of collective insusceptibility to the infection, which does not permit the development of the

epidemic process. Such a tactic is an axiom of medicine in the developed countries, and there it is adhered to without deviation.

On the other hand, what then has taken place in this country, and why has the Soviet Union, along with Turkey, become the arena of the recrudescence of diphtheria? The "deadly ulcer of the throat", as this disease used to be called, was known in ancient times. As far back as the end of the past century in Russia, hundreds of thousands of cases were registered annually in Russia, and the epidemics of diphtheria were like a tornado. Then, in 1923, a method of active immunization against diphtheria was proposed, and the USSR became one of the leaders of mass prophylactic inoculation. A similar effort was carried out extremely actively in the Ukraine as well. By 1980 the incidence of this infection decreased in our republic more than 400-fold.

But, as was often the case, as people's fear decreased, they threw caution to the winds. Solitary cases of diphtheria were hushed up, and the serene conviction that diphtheria no longer threatened children permeated the medical milieu. At the same time, and again without any basis, the failure to take inoculations became an avalanche in the population as a whole. Newspapers, in particular "Komsomolskaya pravda", deployed an anti-inoculation campaign. People have paid a high price for this. Toxic properties were ascribed to vaccines, although not by specialists, and passions were stirred regarding the possible complications following inoculations, although in fact they could be entirely avoided. One way or another, once the unfounded assertions were believed, parents began to refuse immunizations for their children. And since the basic level of immunity in the population fell, diphtheria "raised its head". Over the course of the last five years, its incidence increased characteristically annually by about 1%, leading to a serious epidemic situation by autumn of 1990. The peak appeared in Moscow, where more than 500 individuals became ill with diphtheria.

A genuine signal of alarm sounded. This is how the numbers looked in the Ukraine. According to the data in the middle of August, 590 cases of diphtheria were recorded in the republic, of whom 112 were children. Diphtheria has been found in all of the oblasts, as well as in Kiev and in Sevastopol. The unfortunate situation became complicated by a significant degree of carrying of the diphtheria bacillus, and in comparison with 1990, this contagiousness increased almost five-fold. The increase in carriers of the infection in Kharkov and Zaporozhe oblasts was especially significant. As before, the greatest number of cases was identified in the northern oblasts. The situation in the western oblasts of the Ukraine is alarming; there, in June-July, the incidence increased in comparison with April-May almost two-fold. And this was in the summertime, when an epidemic rise in incidence of diphtheria is atypical.

On the whole, the plan for primary inoculation was fulfilled by 72%, and that for reinoculation by 95% of the

required standard throughout the republic. Progress was perceptible, but it was insufficient for the re-erection of a solid anti-epidemic barrier, all the more so since we were dealing with averaged statistics. In this case the principle "almost fulfilled" is entirely unsuitable.

It is particularly necessary that we speak of Kiev, where 208 cases were identified, i.e. the largest collection of diphtheria cases. Inoculation and reinoculation, using disposable syringes in the process, has been carried out here at 37 inoculation stations. There are several variants of the vaccines available. The immune leukocytolysis reaction was introduced in this country for the first time. When contraindications to inoculations are present, this reaction provides a clear-cut prognosis as to the true degree of risk. Moreover, the child can be inoculated in the hospital, and this provides him with a guarantee of freedom from danger. After all, the infectious assault is increasing; a significantly higher incidence of diphtheria in the autumn is a reality. At the same time, only 66% of children were covered by inoculation in Kiev, and by no means was this always the fault of physicians. Although many youngsters spent the summer outside of the city, every mother received a summary of the child's history of disease with clear indications of further periods of inoculation and reinoculation. Unfortunately, people not infrequently ignore recommendations that would save their lives. This negligence is unjustified.

And this is the reason. Diphtheria, as the result of attenuation of collective immunity and of the large number of carriers of the diphtheria bacillus, has ceased to be a traditional childhood infection. Above all workers in preschool and school institutions, in public food distribution, commerce, and community services belong to the risk groups. In Kiev 214,000 individuals among these contingents were reinoculated, as well as 19,000 students and 196,000 workers in industrial enterprises. The activation of prophylaxis is at hand, but it must be intensified. And this applies to all regions of the republic. I would like to recall the inoculation schedule. The first inoculation is carried out at three months of age, and the two subsequent inoculations are to be carried out at an interval of one and a half months. Thereafter the decreed periods are in effect: 1.5-2 years following the completed initial inoculation at an age up to 3 years, at ages 8 and 14 years, and subsequently every ten years. This schedule must be an inviolable law for the preservation of life and the health of the population.

Diphtheria is one of six widespread infections the World Health Organization hopes to eliminate from the planet by the beginning of the next century. Can the Ukraine return the situation to its previous status and thus assure an enormous medical and social gain which will affect the entire nation? Of course, much will depend on the public health workers, on enhancing the diagnostic alertness, concurrently with a clear strategy of inoculations; but the role of parents is no less vital. That is why I wish to appeal to their reason. I remind them that all cases of diseases of the nasopharynx, and especially sore throats,

must be brought to the attention of the physician without fail. Tardiness in beginning specific treatment, even by several hours, may be ineffective.

Cholera in Oshskaya Oblast

92WE0088B Moscow *ROSSISKAYA GAZETA*,
in Russian 3 Aug 91 p 2

[Article by RIA, "IMA-Press"- "Ural-Aktsent"-TASS; under the rubric: "In a Short Paragraph"]

[Text] The threat of an epidemic of cholera has arisen in the city of Maili-Sai (Oshskaya Oblast). The bacteria have been found in the river, whose water is used by the entire local population.

Cholera in Dnepropetrovsk Oblast

91WE0525B Kiev *RABOCHAYA GAZETA* in Russian
23 Aug 91 p 2

[Article by S. Skirko, UKRINFORM correspondent: "Cholera: Roundabout Maneuver?"]

[Text] Water use in the Samara and Volchya Rivers in Dnepropetrovsk Oblast has been banned. The Oblast Emergency Anti-Epidemic Commission made this decision upon discovery of the cholera vibrio in Pavlograd. It was isolated in the vicinity of discharge wastes from municipal water purification plants in the Samara and Volchya Rivers, near the Pavlograd Chemical Factory beach during periodic monitoring of the water in open reservoirs. As a result normal anti-epidemic measures including a ban on water use followed. The measures encompass three large rayons in the oblast, right down to the oblast center.

We recall that recently after a similar emergency anti-epidemic situation in Zaporozhye we heard the calming predictions of specialists. They said that Dnepropetrovsk was far enough up the Dnepr from Zaporozhye and that there would be no threat to it. But cholera appeared, attesting to our blatant carelessness.

Cholera in Odessa

91WE0525A Moscow *IZVESTIYA* in Russian
28 Aug 91 Union p 4

[Article by L. Ivchenko]

[Text] A cholera outbreak was registered in Vilkovo, Odessa Oblast. Eighteen patients and nine vibrio carriers were identified on 26 August 1991. The first cases of the disease occurred among fishermen at the kolkhoz im. Ilyich who caught fish in the Danube River. According to the USSR Chief Government Sanitation Physician in, A. Kondrusev, the water in this river was the source of the infection, since cholera cases have recently been reported in Romania.

Twenty-five patients and vibrio carriers including a chef at the "Parus" resort base in Primorsk have been hospitalized.

"All the measures essential to preventing an epidemic are being conducted," said A. Kondrusev. "Twenty-six persons at the kolkhoz and 50 individuals at the resort base who were in contact with the patients have been isolated and are being examined. Specialists from the oblast health department, the Odessa Anti-Plague Station, and the Epidemiology and Microbiology Scientific Research Institute of the Ukrainian SSR Ministry of Health are working at the sites of the outbreaks, and a special anti-epidemic team has been sent from the Rostov Anti-Plague Institute for assistance. G. Onishchenko, deputy director of the Chief Epidemiological Directorate, USSR Ministry of Health, arrived at the site.

Anti-Cholera Measures in Odessa Oblast

91WE0525D Moscow TRUD in Russian 03 Sep 91 p 4

[Article by G. Onishchenko, as interviewed by N. Gogol: "Cholera in Vilkovo". First paragraph is TRUD introduction.]

[Text] There are approximately 40 cholera victims in the Kiliya Rayon of Odessa Oblast, most of whom are from the city of Vilkovo. Some of the patients are in serious condition. G. Onishchenko, deputy director of the Chief Sanitation and Epidemiological Directorate, USSR Ministry of Health, just returned from the site of the outbreak.

"Water in the Danube River brought the cholera. This is what the World Health Organization determined, that it came along the channels, which are also found in Romania, territory which borders Kiliya Rayon. The situation there is also poor: 46 cases of cholera were identified as of 23 August.

The investigation demonstrated that the infection began to spread on 19 August, when fishermen at a fishery kolkhoz became ill. Then there were several victims among the patients of a work-therapy preventorium. Sailors from a border guard cutter detachment were the next to become infected.

The situation is exacerbated by the fact that most of Vilkovo, which is built on canals, is in essence a city on the river, and heavily sectioned by these canals. The water in the canals today is dangerous, and there is very little potable water in Vilkovo.

What were we able to do? We performed mass examinations of the people that were in contact with the victims, as well as plumbing and canalization employees, and public food service and trade employees. Leading epidemiologists and infection specialists throughout the country were involved in controlling the disease. The Ukrainian Ministry of Health is coordinating the work.

All the holiday hotels and resorts in the rayon have been closed, and limitations on entry and exit to and from Vilkovo have been imposed.

Thirty-Nine Cholera Cases in Odessa Oblast

91WE0525C Moscow IZVESTIYA in Russian
5 Sep 91 p 8

[Article by L. Ivchenko: "Odessa: The Danube Brought the Cholera". First paragraph is IZVESTIYA introduction.]

[Text] As IZVESTIYA has already reported, there has been a cholera outbreak in Odessa Oblast. Thirty-nine victims and 97 vibrio carriers have already been identified. The "culprit" is the Danube River water, which has carried the El Tor cholera vibrio from neighboring Romania. According to data from the European regional bureau of the World Health Organization, 66 cases of cholera have been recorded in 18 residential areas adjacent to the Kiliya Rayon between here and Romania.

The cause of the outbreak is not only the "importation" of the etiological agent, but also our own misfortune. There isn't a suitable water supply anywhere. This is what G. Onishchenko, the deputy director of the Chief Sanitation and Epidemiological Directorate, USSR Ministry of Health, who just returned from the dangerous site had to say:

"Like Venice, almost half of the city of Vilkovo is on water. Boats and cutters sail along the drainage canals along the streets. Naturally people use the water from the canals for domestic needs because there isn't a better source of water. A one-year-old child that had been bathed in this water by its mother also became ill during this outbreak... On the one hand, people are used to living like this. On the other hand, the plumbing systems are old and often break down, and ground water leaks into the distribution system, such that even those that are able to use the plumbing are not guaranteed clean water. Laboratory analyses indicate unsatisfactory quality of potable water. A widespread cholera outbreak occurred in Vilkovo in 1978, with subsequent isolated cases identified. But the problem of providing the residents with good potable water has not yet been solved. The outbreak is constantly decaying and Vilkovo has literally become a sanctuary for cholera...

Of course, everything is being done to contain the outbreak. An additional therapeutic base consisting of a laboratory and a team of epidemiologists has been sent to the rayon center Kiliya, where the disease is affecting servicemen on the border cutters. Leading scientists from the Odessa Medical Institute and the Kiev Scientific Research Institute of Epidemiology and Infectious Diseases are working in the oblast to prevent the further spread of cholera. A specialized anti-epidemic team from the Rostov Scientific Research Anti-Plague Institute, USSR Ministry of Health arrived on August 25, and within a day 350 laboratory samples had been tested. Local medical forces are also energetically working and

conducting mass examinations of the residents. Approximately 8,000 persons have been examined already. Local governmental agencies are providing substantial assistance to the medical personnel and have also involved the servicemen in this work, the result of which has been tangible. Local agencies have also taken a measure on their own initiative: they have banned all contacts with Romania while trying to contain the outbreak. But they were very busy: during the week several hundred persons crossed the border from both sides.

Highly qualified physicians from the Odessa Oblast Center for Health Protection, the Odessa Anti-Plague Station, the Ukrainian Ministry of Internal Affairs, and the Kiev District of Border Guards, USSR KGB, were also involved in controlling the spread of cholera. A staff under the direction of V. Shestakov, Chief State Sanitation Physician of the Ukraine and deputy minister of public health in the Ukraine, was responsible for containing the outbreaks.

It is still too early to say that the outbreak is beginning to subside, but the situation is under control.

There is yet another bit of unpleasant news to report: cholera has been found in Stavropol Kray. According to the USSR Ministry of Health, the three individuals that have been recorded in Kislovodsk are as yet only vibrio carriers.

Cholera in Danube Delta Region

92WE0088C Moscow *RABOCHAYA TRIBUNA*
in Russian 13 Sep 91 p 1

[Article by Oleg Grabovskiy (Our Own Correspondent), Odessa; under the title: "So It's Cholera Again"]

[Text] Forty patients and more than one hundred carriers of the cholera vibrio is the count up to today of the number of victims of this dangerous disease which has broken out in the Danube bottomlands. "Its appearance

here has been caused not only by intense pollution of this great European river, but also by the alarming epidemiological situation in neighboring Romania," explained Deputy Chief Physician of Odessa Oblast Sanitary Epidemiological Station, V. Prutkin.

The dangerous microbes have been found in the River Prut at the Soviet-Romanian border. It is true that the victim, a Soviet border guard is now well, but this nevertheless does not reduce anxiety.

And now it is the turn of the Danube. The city of Kiliya and the Vilkovo settlement along the water are the areas of this disaster.

Suspected Cholera in Nikolayev

92WE0088H Moscow *TRUD* in Russian 20 Sep 91 p 1

[Article under the rubric: "There's News in Town"]

[Text] Two cholera patients have been identified in Nikolayev. Several other individuals have been hospitalized with suspicion of a similar disease. According to the patients reports, before they had eaten fish purchased in the municipal market.

Cholera in Kislovodsk

92WE0088G Kiev *RABOCHAYA GAZETA* in Russian
5 Oct 91 p 1

[Article under the title: "A Present for the Spa"]

[Text] A "present" to the spa. The word "cholera", which has been heard only in curses and in anecdotes about mothers-in-law, has taken on its own original significance. This dangerous disease has been found in a number of regions. And we now have a fresh case: a vacationer in Kislovodsk, a resident of Krasnodarsk Kray. Cholera vibrio has also been found in his daughter and granddaughter. They have all been hospitalized.

DENMARK**Government Campaign To Vaccinate 12-Year-Olds***92WE0173A Copenhagen BERLINGSKE TIDENDE in Danish 29 Nov 91 p 9*

[Unattributed article: "12-Year-Olds To Be Vaccinated"]

[Text] According to the National Board of Health, far too many 12-year-olds do not get vaccinated against measles, mumps, and German measles. If this trend is not reversed, this could mean that far more of them will catch diseases as adults which could lead to very serious complications.

The National Board of Health, physicians in general practice, the counties, and the State Serum Institute have now kicked off a campaign to get 12-year-olds vaccinated. At the moment just slightly more than one-half of them get the measles-mumps-rubella [MMR] vaccination which, though optional, is strongly recommended by the health authorities. On the other hand, vaccination of children 15 months old is satisfactory. But children need to be vaccinated twice to be adequately protected against the three classical childhood illnesses.

"Some parents think childhood illnesses are innocuous and believe children are better off having had them. But people aren't doing their child a service by failing to vaccinate it," said Dr. Palle Juul-Jensen, the National Board of Health's medical director.

He pointed out that eventually it becomes difficult for a child to become infected naturally, and the risk of the child's first getting infected as an adult is therefore great. The aim is to get all 12-year-olds vaccinated. In connection with the campaign the National Board of Health is sending out informational material to physicians in general practice, schools, libraries, and pharmacies.

Earlier Dr. Tove Ronne of the State Serum Institute had estimated that the vaccinations which had been carried out in the course of just the five years the MMR vaccination has been in existence have spared many children a great number of serious complications.

Thirty deaths were avoided and, for example, 120 cases of meningitis were prevented.

Decrease in Gonorrhea Cases Continues*92WE0173C Copenhagen BERLINGSKE TIDENDE in Danish 18 Dec 91 p 2*

[Unattributed article: "Gonorrhea On the Wane"]

[Text] Gonorrhea is sharply on the wane in Denmark. Last year 1,990 people were diagnosed with the disease, and that was the lowest known number of cases since 1957, when the present reporting system came into effect. EPI-NYT, the State Serum Institute's newsletter,

stated that the incidence of rectal gonorrhea in men in 1990 appeared to be greater.

Doctors Warned of Possible Lung Disease Epidemic*92WE0032A Copenhagen BERLINGSKE TIDENDE in Danish 30 Oct 91 p 5*

[Article by Annette Hagerup: "Warning of Lung Epidemic"—first paragraph is BERLINGSKE TIDENDE introduction]"

[Text] Many cases of pneumonia in recent months indicate that we can expect an epidemic in the coming winter.

The Serum Institute is currently warning the nation's practicing physicians that an epidemic of pneumonia may be on the way. The tricky part is that the symptoms are very similar to characteristic influenza symptoms such as muscle pain and headache.

"There is talk of a so-called mycoplasmic pneumonia which is easy to confuse with influenza. The illness runs a relatively mild course and not everyone sees a doctor. For this reason it can be difficult to establish how many have actually been infected," said Dr. Jorgen Skov Jensen of the National Serum Institute.

Mycoplasmic pneumonia, which chiefly affects the age group between four and forty, was diagnosed in the third quarter of this year in about 175 Danes. In the same quarter last year the figure was 25-30.

Pneumonia is caused by bacteria which cannot be treated with penicillin, but other types of antibiotics, such as Erythromycin and Tetracycline, can alleviate the course of the illness. Mycoplasmic pneumonia does not cause high fever, which is a sign of pneumonia, but it can require a week in bed. A few days of muscle pain, headache, and sore throat are followed by a dry cough, often occurring as paroxysms.

The effects run two to three weeks after the illness itself, and in this period, the sufferer may still be tired and have a sore throat, explained Dr. Jensen.

The illness is contagious only after close contact and is not as easily caught as influenza. Two to three weeks elapse from the time of contagion until the illness breaks out.

Dr. Jensen thinks that the epidemic of pneumonia will taper off in the spring.

FRANCE

New Types of Cholera Vaccines

91WE0258A Paris LE MONDE in French
6 Mar 91 p 16

[Article by Jean-Yves Nau: "The Cholera Vaccines"; LE MONDE introduction is "Effective ways of protecting populations exist, but for economic reasons, they are not implemented"]

[Excerpt] [Passage omitted] During the eighties, molecular biological techniques enabled researchers to gain a much more detailed understanding of the characteristics of the cholera germ (see LE MONDE 15 December, 1983) and of the physiopathology of the disease. Several research studies were then launched in different laboratories to try to develop an effective oral, rather than injectible, anti-cholera vaccine.

In 1984 a Paris Pasteur Institute team, led by Professor Andre Dodin, published the promising results of a campaign conducted in Zaire using a vaccine made from choleric vibrio membrane fragments. Then, in 1986, the initial, very encouraging results obtained in Bangladesh on some 20 to 30 thousand people with a new type of oral vaccine (see LE MONDE 31 July, 1986) were announced. The latter, manufactured by the Merieux Institute, combines killed germs (in a concentration one hundred times higher than in the injectible vaccine) with a fraction of the toxin produced by the germ (sub-unit B).

"The rate of protection a few weeks after ingestion of the two oral vaccine doses is about 85 percent, and we have just demonstrated that, three years later, it is still about 50 percent," explains Dr. Michel Cadoz, assistant medical director of the Pasteur-Merieux Serums and Vaccines Company.

Then why not develop on an industrial scale a vaccine for populations living in regions where cholera is endemic, in order to forestall epidemics? "Unfortunately," says Dr. Cadoz, "our product is hard to manufacture, which gives it a cost price much too high for us to propose it to the countries directly concerned by the risk of epidemic."

The Merieux Institute also says that it is not presently capable of manufacturing the doses that might be necessary to prevent the spread of the epidemic in South America.

There is therefore no question of repeating with cholera the same feat that Dr. Charles Merieux, faced with a serious meningococcal epidemic, performed in Brazil 15 years ago.

In the absence of a profitable third-world market, the Pasteur-Merieux Company's vaccine may nonetheless find an unexpected application.

Specialists have, in fact, noticed that it can protect very effectively against certain diarrheas caused by the

Escherichia coli bacteria, and that often afflict visitors traveling to the tropics. Perhaps it will find a much less prestigious, but much more profitable, future there.

Footnotes

1 Cholera symptoms (diarrhea, vomiting, massive dehydration) are due to the germ's production of toxins that considerably speed up the secretion of water in intestinal cells.

GREECE

Meningitis Cases in Peloponnisos

92P20068A Athens ELEVETHEROTIPIA in Greek
14 Nov 91 p 35

[Text] Pirgos—Ten days after two infant brothers were stricken with meningitis at the Second Children's Center in Pirgos, a new case has occurred despite reassurances from the public health department of the Ilia Nomarchy that measures have been adopted and that there is no danger. This new case has upset parents, who are asking that the center be immediately closed down and disinfected. Parents also allege that a previous request in this sense had been ignored by the competent authorities.

Tuberculosis Recrudescence Causes Concern

92WE0176A Athens I KATHIMERINI in Greek
3 Dec 91 p 4

[Article by N. Karamouzis: "Tuberculosis Recrudescence in the Nation"]

[Text] Each year in our country, at least five to ten thousand new cases of tuberculosis are registered and it is estimated that more than 250 persons die from the disease! Lung-disease specialists have characterized these numbers as unacceptably high, especially considering the fact that we are now entering the 21st century and that in the West tuberculosis is considered to be a very rare disease indeed.

These facts, which are anything but encouraging, on the spread of tuberculosis in our country come from a press interview with members of the Directorate of the Hellenic Association of Pulmonology on the occasion of the 6th Pan-Hellenic Conference on Chest Pathology scheduled for 5-8 December at the Hilton Hotel.

Conference speakers have referred to the existing difficulties in strengthening or even simply maintaining the fight against tuberculosis—a fight which in certain areas of the country has been altogether abandoned.

According to the World Health Organization, in order to stop the spread of the disease, at least 85 percent of all children six years old must be inoculated. It is worth noting that inoculation in our country reaches fewer than 50 percent of our children. The reasons for this are technical problems such as lack of personnel, vaccine shortages, etc.

Since the epidemiological statistics for Greece are significantly lower than those of the most advanced countries in the West, lung-disease specialists have characterized them as unreliable. According to the 1991 reports issued by the Ministry of Health, there are about 10 to 12 new cases of tuberculosis for every 100,000 patients per year; yet specialists maintain that such a percentage cannot be accurate since the corresponding numbers [for advanced Western countries] are at least five times higher. The discrepancy, the specialists believe, is due to the fact that a very large percentage of TB sufferers do not get reported.

The pollution of the atmosphere, especially where children are concerned, causes increased morbidity and constitutes a perpetual threat to their respiratory systems.

According to a study completed two years ago, around Ptolemaida—an area that has suffered from increased industrial pollution—one half of the villages' adult populations and 12 percent of the children present symptoms of bronchitis.

Another study has shown that by comparison to the children of Zakynthos (where there is no pollution), those of Attica rank in the lowest physiological classification regarding their respiratory functions, even though they have a higher growth rate.

The following facts were also mentioned during the press conference yesterday:

- The morbidity indices for asthma and chronic bronchitis are rising, as is the rate of asthma in children. The latter, which did not exceed 3 percent of the population during the past decade, at present has

risen to 6 percent. Chronic bronchitis and emphysema are closely connected to smoking and atmospheric pollution.

- Whereas in other countries the incidence of lung cancer has stabilized or decreased, in ours it continues to increase. Five thousand Greeks die annually of lung cancer. The majority of them would not succumb to the disease if they did not smoke.
- Eight out of every 10 AIDS patients will die of pneumonia.

TURKEY

All Schools Close Due to Flu Epidemic

TA2001182392 Ankara TRT Television Network in Turkish 1700 GMT 20 Jan 92

[Announcement by National Education Minister Koksal Toptan in Ankara on 20 January 1992—recorded]

[Excerpt] In recent days, we have been obliged to close some schools in certain provinces because of the flu epidemic caused by frequently changing weather. In a telephone conversation today, our health minister told me that the flu is beginning to spread to other schools as well. Following this conversation, our ministry has assessed the situation and decided to close our schools as of tomorrow morning to prevent the epidemic from spreading further.

Accordingly, all private and public kindergartens, primary and secondary schools, as well as extracurricular classes will be closed until Friday evening, when the semester vacation begins. The four-day vacation does not mean that the semester vacation will start earlier and end earlier. Schools will reopen as scheduled, on 10 February 1992. [passage omitted]

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